

On this notice, give it to any postal employee, and it will be put in the hands of our Soldiers or Sailors at the front.—A. S. BURLINSON, Postmaster-General.

May

3495
N 282

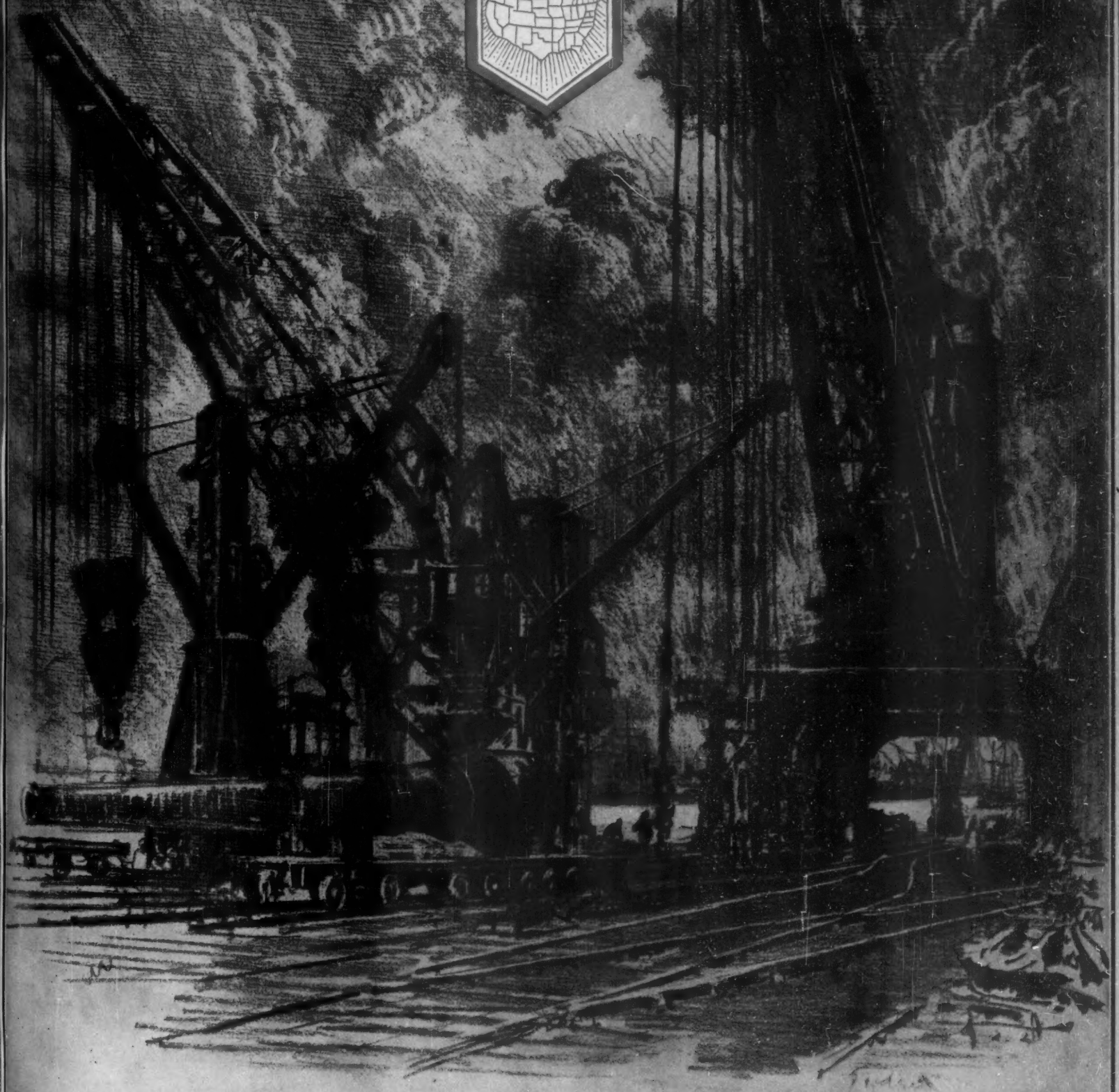
GENERAL

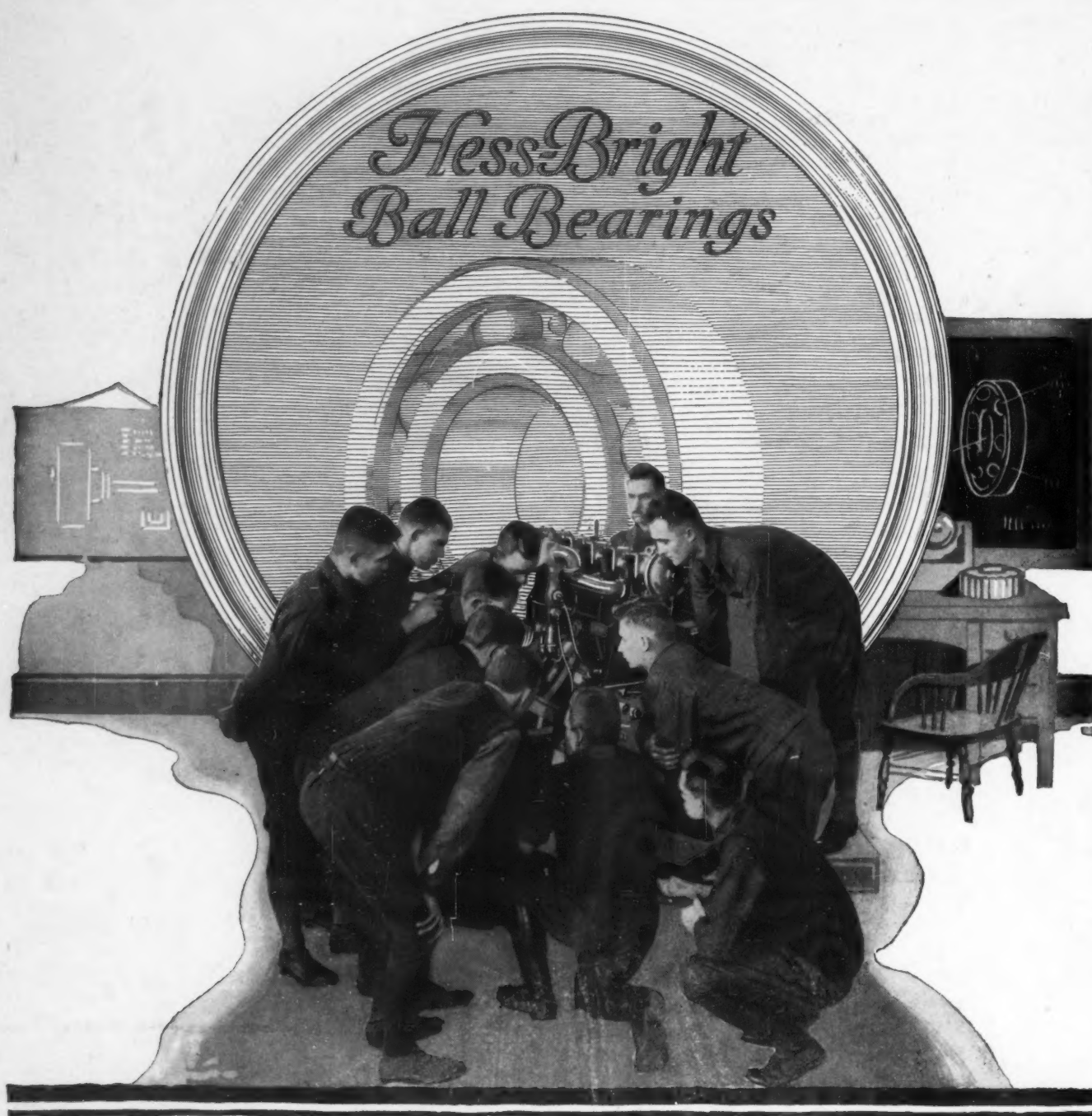
AUG 20

1918

THE UNIV. OF

NATION'S BUSINESS





Learning the lesson the bearings teach—

is an important phase of our air pilots' training. For during maneuvers in the air the lives of men or success of battles are staked against the integrity of an assemblage of metal parts—the ball bearings. That the Hess-Bright product successfully withstands the excess strain and stress in such service is a fitting testimonial of the choice of materials and care of workmanship used in

their manufacture. And there's a lesson in such performance for the motorist and truck owner. For the service so rendered makes the lesser strains of lighter usage a smaller matter. Hess-Bright reputation is based on bearings built to stand more stress, more rough treatment and less attention than you can give them. And that reputation is maintained by the manner of their making.

THE HESS-BRIGHT MANUFACTURING COMPANY

Where Performance takes Preference over Price

Exceptional British facilities now available



The trade acceptance method

which is assuming such prominence in American commerce is fully treated in a series of pamphlets issued by the Irving National Bank.

Copies will be forwarded upon request.

TO secure more highly specialized relations with Great Britain, the Irving has entered into a reciprocal working arrangement with the London Provincial and Southwestern Bank, Limited. An American department will be established in the London Provincial and Southwestern and in an English department in the Irving.

This plan assures the closest co-operation and creates mutually increased spheres of influence. It offers our customers unusual facilities and the benefit of a wide knowledge of British trade conditions.

IRVING NATIONAL BANK

WOOLWORTH BUILDING, NEW YORK



STRICTLY A COMMERCIAL BANK



THESE are the days when more things and bigger things must be done. When every minute and every dollar must count. When real economies must be practiced. When machines must release human power.

Dollar Saving Ability must be studied and adopted. Saving in dollars, saving in time and saving in energy should be encouraged.

Saving 51 Per Cent

The typewriters in your office, for instance: Are you saving in dollars in buying them? And are you saving in the energy of your employees in their use?

Are you still paying \$100 for standard typewriters? Buying them in the old expensive way?

Or, are you buying the Oliver and saving \$51 on each and every typewriter bought?

By the elimination of useless selling expenses—by giving up expensive sales offices—by the cutting out of duplication of selling effort and by doing away with other wasteful methods, the Oliver Nine now sells for \$49 in place of \$100.

The same identical, brand new standard Oliver Nine that is preferred by many of the leading industries. Over 600,000 sold.

Protecting Buyers Against Increasing Costs

We, in common with other makers, faced rapidly increasing manufacturing costs. An advance in price seemed inevitable. But instead of advancing the price of the Oliver Nine we cut it in half—we were able to do this by eliminating extravagant selling expenses.

Against all precedent The Oliver Typewriter Company took the sensational step of cutting prices in half when every reason made logical an increase in typewriter prices. Always a leader—this bold step by the Oliver proved increased costs could be met by better selling methods. In spite of advanced prices in practically all commodities the Oliver Typewriter was reduced one-half. If you believe in our policy—if you are against waste in distribution—expense for which the buyer ultimately pays, you will unquestionably decide for the Oliver.

Economy in Workers' Time

Operators can do more work and better work with less fatigue with the Oliver Nine. This is not a theory, it has been demonstrated time and again. The keyboard is standard—any operator turns quickly to it without difficulty. It has many saving features not found elsewhere.

If any typewriter is worth \$100 it is this sturdy, speedy, improved Oliver Nine.

The Oliver output has increased over 300 per cent.

Whether you use 1 typewriter or 100, this new Oliver plan saves you. No typewriter is speedier. None are more satisfactory in the long run than the Oliver Nine. All this you can know for yourself very easily.

BOUGHT AND USED BY

U. S. Steel Corporation
Pennsylvania Railroad
National Cloak & Suit Co.
National City Bank of N. Y.
Otis Elevator Co.
Corn Products Refining Co.

Montgomery Ward & Co.
Columbia Graphophone Co.
New York Edison Co.
Hart, Schaffner & Marx
Diamond Match Co.
Boston Elevated Railways

Baldwin Locomotive Works
Bethlehem Steel Co.
Cluett, Peabody & Co.
American Bridge Co.
Fore River Shipbuilding Corp.
Morris & Co. (Packers)

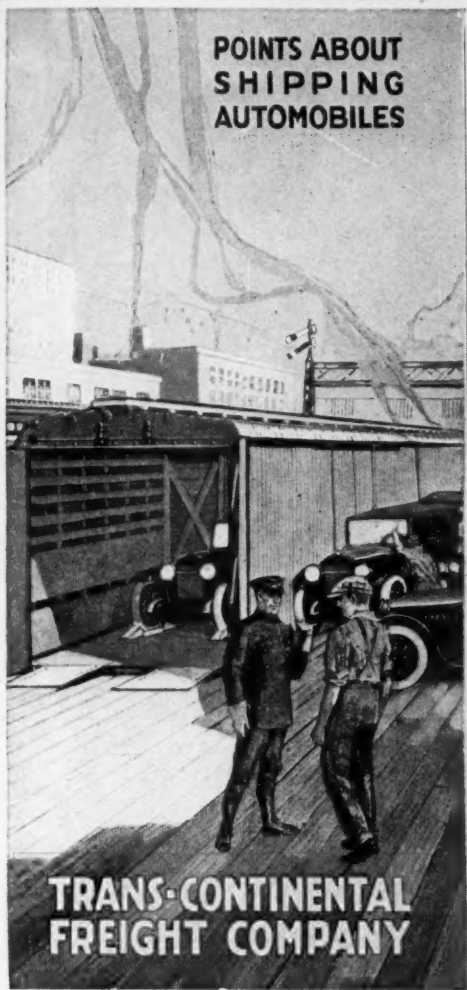
AND OVER 600,000 OTHERS

Send for the remarkable book that tells the whole story, "The High Cost of Typewriters—The Reason and the Remedy"

The OLIVER Typewriter Company

255 Oliver Typewriter Building, Chicago

POINTS ABOUT
SHIPPING
AUTOMOBILES

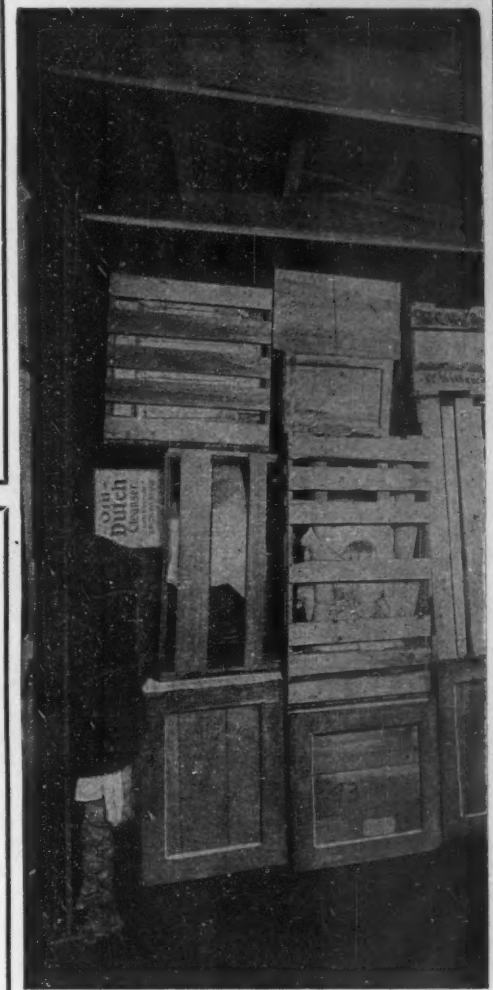


TRANS-CONTINENTAL
FREIGHT COMPANY

TRANS- CONTINENTAL FREIGHT SERVICE



*Affords Lower
Freight Rates*



Trans-Continental Freight Company Service

Consolidated Car Service from Chicago to China, Japan, and Philippines.

Consolidated Machinery Car Service from Chicago and Philadelphia, to California, Oregon and Washington.

Consolidated Machinery Car Service from Chicago and Cincinnati, to New York and New England Points.

Automobiles in Through Cars to Los Angeles, San Francisco, Chicago and Denver, and from Los Angeles, San Francisco, etc., to Chicago, New York and all Eastern Points.

Household Goods in Through Cars to and from New York and Chicago to California, Oregon and Washington.

This Service embodies not only the loading and unloading by experts, but

AFFORDS LOWER FREIGHT RATES

Send for booklets describing the advantages of T-C. F. Co. Service, also "Foreign Trade Suggestions"—the Exporters Handbook; "Points About Shipping Automobiles"—the Auto Shippers Handbook; and "A Formulary on Freight Forwarding," the books which show how shippers can secure decided money saving,

AND DECIDED TIME SAVING

TRANS-CONTINENTAL FREIGHT COMPANY

Woolworth Bldg.

Telephone Barclay 3940

NEW YORK

General Office, 203 Dearborn St., Chicago

Old South Bldg., Boston
Van Nuys Bldg., Los Angeles

Ellicott Square, Buffalo
Pacific Bldg., San Francisco

Union Trust Bldg., Cincinnati
Alaska Bldg., Seattle

WRITE THE NEAREST OFFICE



WESTINGHOUSE AIR
BRAKE COMPANY
HERDING, PENN. U.S.
NO. 12,210
PATENTED

1869

Pioneers

Westinghouse Air Brake Co.

Specialists

1918

In This Number

	PAGE		PAGE
Moving the Big Gun	The Cover	Editorial Comment	34
From an etching by Joseph Pennell.		Trucks for the Roads, Roads for the Trucks . . .	36
Thinking It Through Together	9	F. A. Seiberling, President Goodyear Tire and Rubber Co.	
Frank W. Noxon, Secretary, Railway Business Association, New York.		The Neck of the Bottle Is Ships	37
The Nations in Their Harness	11	Josephus Daniels, Secretary of the Navy.	
The Earl of Reading, British Ambassador Extraordinary and Minister Plenipotentiary on Special Mission.		The Horns of Our Railway Dilemma	39
Foreign Trade Will Promote Our Industry If— . .	12	Samuel O. Dunn, Editor Railway Age.	
Dr. F. W. Taussig, Chairman United States Tariff Board.		Floating the Nation's War Debt	41
The Wheels Which Must Not Stop	14	David R. Forgan, President National City Bank, Chicago.	
George N. Peek, Industrial Representative of the War In- dustries Board.		Building Fighting Spirit and Ships	42
Employer and Employee Plus Understanding . . .	16	Crawford Vaughn, Formerly Premier of South Australia.	
Professor Leon C. Marshall of the University of Chicago.		Business Assays High in War's Test	43
Work Like Blazes, Says Labor to Labor	17	Waddill Catchings, Chairman War Service Executive Com- mittee, Chamber of Commerce of the United States.	
Meyer Bloomfield, Industrial Service Department of the Emergency Fleet Corporation.		When This Nation Wills Ships	46
Lighting the Way for Payers of War Taxes . . .	19	E. A. Filene, Chairman War Shipping Committee, Chamber of Commerce of the United States.	
Wallace D. Simmons, President Simmons Hardware Company.		The Miracle of the Ships	48
Business and the First Year of War	20	Dr. Charles A. Eaton, National Service Department, Emergency Fleet Corporation.	
Giving the Motor Trucks More Gas	24	If Business Takes the Trade Acceptance	49
A. C. Bedford, Chairman of the Board, Standard Oil Co.		Lewis E. Pierson, Chairman of the Board, Irving Nat'l Bank.	
The Question of the Terminals	25	A Continent For a Shipyard	50
John F. Wallace, Chairman Chicago Railway Terminal Commission.		George J. Baldwin, President, American International Ship- building Corporation.	
Rails	26	Shipping via the Highways	51
Harry A. Wheeler, Chairman Committee on Railroads of the Chamber of Commerce of the United States.		Roy D. Chapin, Chairman Highway Transportation Com- mittee of the Council of National Defense.	
Economy Bonds, Inflation's Antidote	28	Waging War with the Tax and the Bond	53
O. M. W. Sprague, Professor of Economics, Harvard University.		Charles S. Hamlin, of the Federal Reserve Board.	
Faith and Work	30	First Aid to Public Utilities	54
Franklin K. Lane, Secretary of the Interior.		Thomas N. McCarter, President Public Service Corporation of New Jersey.	
Industrial Idealism the Motive Power of Ameri- can Progress	32	Cutting Our Locomotives to One Pattern	55
R. G. Rhett, President of the Chamber of Commerce of the United States.		Alba B. Johnson, President Baldwin Locomotive Works.	
Winter Wheat Looks Up Under Stimulating Rains	33	Our Two Industrial Levers	59
Archer Wall Douglas.		John V. Farwell, President John V. Farwell Co., Chicago.	
		The Month in Congress	60
		Business Registers "Speed"	66

THE NATION'S BUSINESS

Published Monthly by the Chamber of Commerce of the United States
MERLE THORPE, Editor



As the official magazine of the National Chamber, this publication carries authoritative notices and articles in regard to the activities of the Chamber, its Board of Directors and Committees. But in all other respects, the Chamber is not responsible for the contents of the articles or for the opinions to which expression is given.

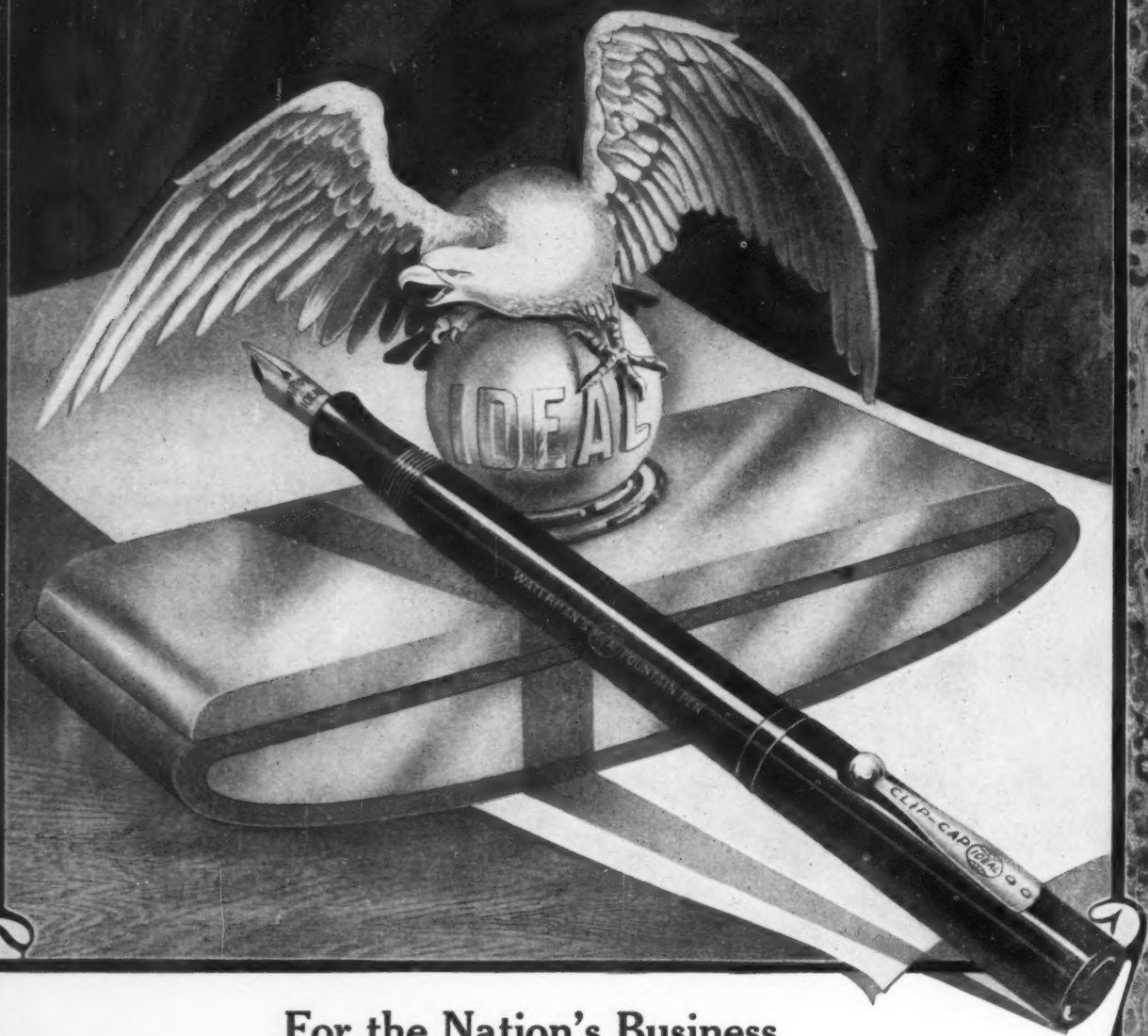
Subscription Price: Three Dollars a Year; Twenty-five Cents a Copy.

Editorial and Publication Offices: Riggs Building, Washington, D. C. New York Office: Woolworth Building. Chicago Office: Otis Building. San Francisco Office: Merchants Exchange Building.

Entered as second class matter February 18, 1913, at the Postoffice at Washington, D. C., under Act of March 3, 1879.



Waterman's Ideal Fountain Pen



For the Nation's Business

*Self-Filling, Safety and
Regular Types*

Sold at the Best Stores

**\$2.50, \$4.00, \$5.00
and up**

L. E. Waterman Co., 191 Broadway, New York

24 School St., Boston
41 Kingsway, London, W. C.

115 So. Clark St., Chicago
6 Rue Monsigny, Paris

17 Stockton St., San Francisco
Avenida de Mayo 1364, Buenos Ayres

179 St. James St., Montreal

Foreword

AMERICAN business sat in conference on the nation's business at Chicago last week. From every state and territory the representatives of American business came, to propound, weigh, and take action on those commercial and industrial problems which are at once the individual's and the nation's.

They considered the tremendous readjustments in industry which we must make to win the war; they considered the billions involved with the attendant infinite reactions on our financial structure; they considered transportation—rail and ships and highways.

Here came leaders, both government and industrial, with carefully-thought-out plans and recommendations, who in a spirit of helpfulness traced the steps by which they reached conclusions.

No reader of this magazine but whose business is vitally concerned in one or more of these questions; no reader whose national interests are not concerned in all!

To our readers, then, we bring this month the points of view of government and industry on these outstanding problems. We report also the conclusions reached by these representatives of a half million American business men. And throughout it all will be found one insistent note: *To the end that "the sword shall not be sheathed until the purpose for which it was drawn has been accomplished" the government shall have every ounce of productiveness within the compass of American industry.*

THE EDITOR.

Barrett Specification Roofs

TURNER CONSTRUCTION COMPANY
REINFORCED CONCRETE CONSTRUCTION
CONTRACT DEPARTMENT
210 N. PLAZA
NEW YORK 17, N. Y.
244 MADISON AVENUE
NEW YORK

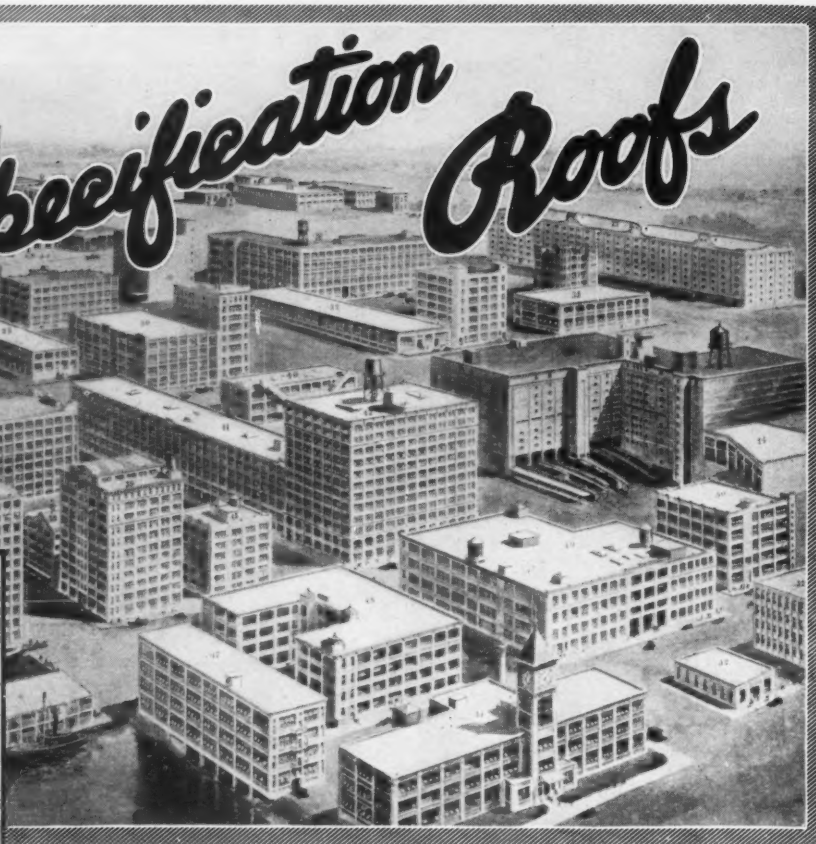
December 20, 1917.
The Barrett Co., New York, N. Y.

Gentlemen: Herewith is the new composite drawing of all the buildings we put up last year—the "Turner Concrete City" of 1916.

So far as the roofs are concerned it is also a "Barrett City," for practically every roof in sight is yours. The use of The Barrett Specification, as you know, has been practically standard practice for years with us.

On these 70 various buildings we dealt with 31 prominent architects or engineers, and the general use of Barrett Specification Roofs tells its own story.

gms



One Year's Work of One Construction Company

Barrett Specification Roofs Cover over 90% of the Latest "Concrete City"

The great Turner Construction Company has pictured in this drawing a composite view of seventy concrete buildings which they erected in 1916.

It is a representative group of modern industrial edifices and the principal architects and engineers of America cooperated with Turner in drawing designs and specifications.

Over 90% of all these buildings are covered with Barrett Specification Roofs.

Turner's letter, reproduced above, speaks for itself. Read it.

Barrett Specification Roofs are used on most of the permanent structures of the country.

This is not to be wondered at when you consider that they cost less per year of service than any other kind; that they are free from maintenance expense; that they take the base rate of fire insurance; and, finally, that they carry a 20-Year Surety Bond Guaranty.

To any one interested we will send free, on request, a copy of The Barrett 20-Year Specification with the necessary roofing diagrams.

The **Barrett** Company

New York
Detroit

Chicago
Birmingham

Philadelphia
Kansas City

Boston
Minneapolis

St. Louis
Nashville

Cleveland
Salt Lake City

Cincinnati
Seattle

Pittsburgh
Peoria

Montreal

Toronto

THE BARRETT COMPANY, Limited

Winnipeg

Vancouver

St. John, N. B.

Halifax, N. S.

Sydney, N. S.



THE NATION'S BUSINESS

A Magazine for Commerce Business Men

VOLUME 6, NUMBER 5

WASHINGTON, MAY, 1918

Thinking It Through Together

How Views of Business Leaders Flowing at White Heat Fused into a Practical Patriotic Plan of Action

By FRANK W. NOXON

Secretary of the Railway Business Association, and Author of "Are We Capable of Self Government?"

PRESIDENT RHETT let fall the gavel for the last time on the Sixth Annual Meeting of the Chamber of Commerce of the United States. American business men—three thousand of them—had gathered at Chicago in stronger numbers than at any previous meeting, not excluding the War Convention in Atlantic City last year. They had left executive desks for a whole week out of a year when executive direction means so much to their interests and the interests of the nation, to take part in a convention. Naturally the question: What had it profited them—and the American business which they represented? Still deeper: The standard of the organization is "If it is not for the common good it is not for the good of business;" what, then, profited the "common good?"

Did these men come to hear Josephus Daniels, Franklin K. Lane, Charles S. Hamlin, Frank W. Taussig and the Earl of Reading? One of them sat in a committee meeting when the hour arrived for the British Ambassador's speech in the Auditorium across the street. "If Lord Reading," he remarked, "can say anything that will make me want to win the war any more than I do now I'll move that we adjourn for an hour and go over to hear him; but I don't think he can, and much as I'd enjoy hearing his speech I move that we stay on the job." It was unanimously car-

ried and the committee members, as Lord Reading would have had them, plodded on through the hours.

Preoccupied to desperation, each with the war problems of his community and with his own problems, these picked cohorts, whom John H. Fahey calls "shock troops," attended this, their war college, for a three days' course. By contact with headquarters officers, with the scouts and with the airmen of organized business they studied the situation, tactics and strategy. At the same time they rededicated American business to sacrifice and devotion for the cause of freedom.

Two questions:

1. What is anybody anywhere doing to win the war that we are not doing in our town and ought to be doing?

2. What things ought the Government to do to win the war that it is not doing? And how can we in our town help persuade the Government to do those things and help the Government to do them?

These are the questions that delegates to the Chamber convention came to have answered.

And answers they got.

To Question No. 1 a reply was given by James Hutchings of Rochester, N. Y., who related at one of the sessions the story of how Rochester citizens take care of temporary housing, local transit, education and amusements in order to speed up ship production. Out of that convention went back home to their communities all these hundreds of organization leaders, equipped with the last word in methods of helping keep operation continuous in towns where ships or ship parts are building. They are the stripe of men who know how to start things, who are in the habit of starting things, whose fellow townsmen are accustomed to following and finishing what they start and who have the organization. Home with them they carried the design of a community scheme outlined by Mr. Hutchings of Rochester, and rounded out by stories from B. F. McLeod and Philip H. Gadsden of Charleston, S. C., Charles E. Falconer of Baltimore, and Edgar S. McKaig of Philadelphia. Thus a vogue spreads over a continent by systematic propulsion. This for one thing profited the convention.

To Question No. 2 as to what the Government ought to do, answer was given by the headquarters officers and the scouts and the air men; in other words by those leaders of the Chamber who serve it at Washington. One answer was that ever since the Chamber's War Committee last July began sending out bulletins about centralization of purchases progress had been made towards single control. From that day when a Cleveland busi-

ness man who had put on a major's uniform took it off again to become Assist-



COMMITTEE ON PUBLIC INFORMATION

Before these student soldiers started to charge that imaginary enemy trench, they went through a long training in keeping step, drilling, signals, submitting to leadership, thinking of comfort and safety last. Back of them is training the army of American business men. For five years they have been learning to keep step. Now they are learning war signals and to think of individual interests last

tant Secretary of War Crowell, steps toward concentration of responsibility multiplied, with the result, for one thing, that delegates to the Chicago convention missed face after face of the regulars, who one after another have put khaki on as Major Crowell was taking it off, and are giving their business experience and ability to the business side of smashing the Hun. But, said the Chamber, one step still remains.

This is legislation to give the central purchasing authority supreme power to act instead of merely advisory power. Chairman Baruch of the War Industries Board can stop the purchasing man in one of the military bureaus from doing something he wants to do, because Mr. Baruch can get Mr. McAdoo to deny this purchasing officer transportation, or Mr. Hurley to refuse him lumber, or Dr. Garfield to deprive him of coal; but if Mr. Baruch wants him to do a certain thing and he declines, there is nothing Mr. Baruch can do to make him, because his positive power comes direct from Congress and unless he feels like it, he need not take orders from anyone else. As one delegate observed, "There is plenty of machinery in Washington for preventing things from being done; what we want is machinery for getting things done."

Overman bill? Not by name and not quite by contents, but power to the President for "reassignment of functions and readjustment of relations among the various departments and special bureaus actively engaged in war work, as well as power to create new agencies." This being considered the main thing the Government should do, how shall these hundreds of delegates help bring it about? The resolution bids the Board of Directors "continue its efforts for centralization of control and responsibility and to present the views of the Chamber to the chief executive and to the Congress." Knowing the status, the provision to try for, and the officials concerned, these delegates went back home each to work out through his own constituent body in its own way the method for stimulating discussion, promoting the formation of opinion and acquainting the President and members of Congress with such opinion when formed.

So on through the category of things that somebody is doing somewhere and that we ought to do in our town and the things that the Government should do and business men urge it to do. This profiteth the convention—that whether it is Waddill Catchings of New York drafting me to dig in for unified Government purchases or Edward A. Filene of Boston assuring me that a worse catastrophe than loss of sight would be to come to the end of the war without having made any sacrifice to help win it; whether it is these, or Powell Evans of Philadelphia calling on me to investigate the anti-trust acts as conspiracies in restraint of trade, or Harry A. Wheeler of Chicago inviting me to consider the danger of delaying car and locomotive production in order to standardize or Wallace D. Simmons of St. Louis urging me to help persuade Congress to correct the tax laws—whichever it is and whatever he calls upon me to do I know that behind him is a committee which has been keeping close to the works and that research, conference and interchange with officers and Government form the background of knowledge upon which these leaders bespeak my support for their conclusions.

Indeed, all or most of these requirements were met at the Chamber convention in dealing with major affairs. There were several little houses of representatives—"groups"—all running full blast at once. Note well: That the wilful and lawless American business man has only to be reminded that such and such is according to the Chamber's rules and forthwith acquiesces, his countenance beaming with pride, pleasure and infantile docility. The Chamber rules in six short years he has come to revere; for those rules have worked. Lo, is not the Chamber with us, intact and unsullied, functioning in some respects differently from general sophisticated expectation, but pretty nearly according to the calculations of its architects?

A resolution, to be considered at any annual

AN INTERPRETATION

OUR readers are entitled to an independent interpretation of the Annual Meeting of American Business. Mr. Noxon attended every session and has written such an interpretation against his background of economic, social and industrial understanding, together with his quick intuition of limits and potentials of organization.—The Editor.

meeting, must be mailed to me at least forty days in advance. If, however, the Board of Directors by a two-thirds vote so orders, the Committee on Resolutions may consider a resolution which I propose from the floor of one of the little congresses.

Contrast, if you please, the Chamber's mechanism of platform-making with that of a national political party! On each leading question the Chamber maintains a committee, whose chairman and some of whose members were present and participating in each group discussion. They have research, printed information, a tradition. Specialists by invitation delivered addresses, followed by discussion. A committee in each group drafted at recess resolutions to be recommended to the Board of Directors asking the two-thirds vote which would send the expression without the Board's opinion to the Committee on Resolutions.

The Way of a Resolution

THESE committee members under the chairmanship of Ernest T. Trigg of Philadelphia were so conscientious that if they felt moved to introduce into a declaration substance not contained in the draft handed to them they would send it back as new matter for new sanction from the directors. In the Resolutions Committee itself when a subject was reached Chairman Trigg could usually call on one of his colleagues who had participated from the early stages or he could send for some delegate outside the committee distinguished for special familiarity with it. When a declaration committing the Chamber to a policy finally reached the convention on the last forenoon everyone knew the filtration plant through which it had run, and put the

cup to his lips with confidence and gusto. Where did the 1918 Annual Meeting take us? What is different because it occurred?

It would be an affectation to pretend that the most significant and impressive aspect of that gathering was anything which is disclosed in resolutions adopted or in resolutions pigeon-holed. Henry P. Kendall of Boston at the meeting of the National Councillors reporting for the Committee on Industrial Relations, advised the delegates to read as reprinted in a supplement to the *New Republic* the programme of the British Labor Party. Mr. Kendall explained that what they would find there is an illustration, as he phrased it, of the lengths to which voluble persons may go; the extremes in which current thought in some strata is taking form; and Mr. Kendall sounded the caution, which he said would have been valid even if there had been no war, that the employer of the immediate future would either adjust himself to changing conditions and views or, as the speaker said, "be destroyed."

In that convention there was a fairly wide spread of temperament on the social question. To disregard the non-employed element which is present in every Chamber convention, one encountered manufacturers and merchants who ranged from unterrified defenders of the institution of property including what they term the right to employ and be employed, to the protagonists of the trusteeship idea of property and management. In view of the intensity which has been attained in the discussion of this theme, it seemed to me full of meaning that throughout the addresses and the discussions there was evident an absence of anything like conscious schism or grouping along lines of social views. Everywhere was a white heat of ardor for the war and for the aspirations to which it has given a new horizon—a pervasive "possession," to use the scriptural word, in which I believe there was intermingled the high resolve of men, whatever their economic predispositions, that they will merge themselves in the common quest of a social solution to make worth preserving that civilization which all have united to save from the Hun.

But turning to the more concrete problems, what did the convention do?

In addition to the concerted movement for communities to help in an organized way for continuous operation on ships and ship parts, this convention gave a formal impetus to the coordination movement in local campaigns for war relief funds, although after once favoring the so-called "war-chest" method the convention, learning that Chicago regards individual campaigns by authorized bodies from time to time as a stimulus to patriotism, amended the text so as merely to favor "suitable" methods of coordination. To state utility commissions the Chamber appealed for relief for utilities where they need rate advances.

Reaffirming its advocacy of central government purchases and price control, the Chamber endorsed the resolutions adopted by the War Industries Board on March 25 designed to discourage construction undertakings unless directly or indirectly helpful in winning the war or in the public interest. The War Industries Board was requested to declare what industries are essential. The Chamber redoubled its advocacy of universal military training. Close scrutiny—(Continued on page 56)

THE NATIONS IN THEIR HARNESS

In the Furnace of War We Are Welding Our National Hopes and Ideals Solidly Into One With Those of Our Allies—and With Those of All Humanity

By the Earl of Reading

British Ambassador Extraordinary and Minister Plenipotentiary on Special Mission

WAR demands, in an unlimited degree, production and service from all citizens. Production makes new demands.

Finance assumes vastly greater proportions. Man power has calls upon it of an unprecedented character. Raw materials are diverted into channels to which they are in such volume unaccustomed. Manufacturers, and indeed all commerce, has to devote itself in the main to the pursuit of war, with the consequence that the whole of the country gradually learns that the commerce which is less essential for war purposes must give place to that which is more essential for war needs.

When the great storm cloud burst in December of 1914, Germany ruthlessly mobilized all her industries for war purposes.

We in England have been slower to learn the lesson. We were a peace-loving country, as are you Americans; and we perhaps were nearer the possibilities of war than ever you dreamt would be your lot.

We, in England, soon found ourselves faced with the critical question—but one which I am glad to say admitted of no hesitancy on our part.

I never think of the war without realizing what the great comradeship is between my country and France at this moment. For three and a half years we have stood together and held the western gate. We have had great trials, both of us. We have made enormous demands upon the man-power of our country. We have suffered great losses. We have poured out treasure, but what is far more important, we have shed much blood. But we stand together today at the present moment engaged in withstanding the attacks of the enemy concentrated upon us.

There we are, not only comrades, but indeed linked together as brothers in one cause, and whatever hereafter may be said of what happened then, of this I do feel sure, France and England—assisted particularly as they are and ever will be in an ever increasing degree by America—will hold that gate.

When you of America entered this war I doubt very much whether you realized in its entirety what your entry meant to us. When I say "us," I mean to the Allies. It was not only the men, the money, the materials with which you could assist, it was that when you

entered, after considering and weighing the evidence before you of the causes of the war, you set the seal of America upon the moral issue which is involved.

stood what the object of the demand has been. We have pursued a course of conferring with the representatives of labor; with the leaders of the trades unions, with those who are accorded by their fellow-workmen to be their spokesmen, and we have found it answer exceeding well.

Again and again there have been requests which have necessitated discussion and explanation and our government has then expounded the views which led up to the demands and we have found always—maybe sometimes after hesitation on the part of one or the other—but nevertheless in the end with complete unanimity, labor is supporting the government in this war.

I believe that it is important for the workmen here, as it is with us, that they should realize that all their efforts are directed to winning the war.

What America has produced in foods has been of the greatest consequence to the Allies. We are not able in my country to feed ourselves by what we grow.

You Americans have helped further by reducing your own consumption of articles of food, that you yourselves grow in your own country. You have done it voluntarily.

When thinking of the food that is sent over to our country, with all the other materials, one naturally comes quickly to considering the limitations that are placed upon it. They are two. The first is that of finance; the second is of the shipping capacity. With regard to finance—you have made that easy for us, because ever since you have been in the war you have been assisting us by loans to all the Allies, loans of money which are spent almost entirely in your own country; loans which are of the greater value to us, because they have provided us with the medium of payment. We were not in difficulty in my country in finding the money to pay for things in our own country. Our difficulty was to find the medium of payment in your country. The trouble was how to convert pounds sterling into dollars.

Our expenditure has now risen to about thirteen billion dollars in the fourth year, and that works out at a rate of something approximate to three hundred dollars per head of population. If you were to translate that into figures of your own country, upon the same standard it would mean that your expenditure would have reached 27 billion dollars. It has not reached that. If I am not mistaken—but I won't (Continued on page 80)



DRAWN ESPECIALLY FOR THE NATION'S BUSINESS BY C. H. DICKSON

You gave your moral support. Your President, with that marvelous lucidity of thought and expression which is his gift, has expressed in noble language what this moral issue is.

From the beginning of this war until now labor has played a splendid part. It has assisted in the conferences with the Government. It has taken its part in the cabinet of our country. It helps to rule the country, and it has every time that a demand has been made of it, responded after it has once under-

Foreign Trade Will Promote Our Prosperity If—

By **DR. F. W. TAUSSIG**

Chairman United States Tariff Commission

Whether We Produce Cheaply—and Effectively—and Exchange to Advantage Our Goods for Those of Other Countries Is the Test to be Applied

IT is strange that trade between nations should play so large a part in fomenting war and warlike spirit. Trade, after all, is the peaceful exchange of goods; the more extended and far-ramifying it is, the more we should expect a trend toward peace and a decline of war. Yet rivalry in foreign trade is a powerful adjunct to the forces making for war. It leads unceasingly not only to aggression and contest, but to suspicion, irritation, diplomatic intrigues and squabbles.

Doubtless there is exaggeration in the statement that the struggle for trade is the main and sufficient cause of all modern wars; other factors are at least equally potent, not least among them the inborn fighting instinct. Indeed, economic rivalry seems often to be an unconscious manifestation of the spirit of pugnacious emulation. Each nation takes a pride in being the first, the victor, in everything—in sport, in art, in letters, in science, in war, and in trade also. We have to deal not with a purely mercenary or material state of mind; it is one of pride and glory, not entirely good, but surely not entirely bad. Whether deemed base or noble, the commercial phase of international emulation has of late contributed less to peace between nations than to war.

Trade rivalry is fomented and embittered by common misconceptions about the relation between foreign trade and general prosperity. Many persons, perhaps most persons, think of foreign trade, and especially of exports, as being of cardinal importance to a nation. They think of the export trade, not perhaps as the one fundamental source of prosperity, but certainly as a peculiarly important one. It is regarded as the test and measure of national gain or profit, the main thing to be striven for by commercial policy.

The Balance of Trade

WE all know, but constantly forget, that foreign trade, and more particularly exports to foreign countries, do not enrich the country by the process of bringing in money. No educated man would put forth in so many words the view that it is the balance of trade, or the difference between exports and imports, that signifies for a country's prosperity. But many educated men fall into a way of talking in which this view is implied. To the man on the street it often seems an obvious and undeniable truth.

Now, the one great fact in the normal trade of peaceful times is the extraordinarily small flow of money in the settlement of foreign trade. By "money" in foreign transactions we mean gold. Though every individual transaction is in terms of money, and though the aggregate transactions in terms of money are enormous, running into billions and billions, the actual amount of gold that changes hands is insignificant. Very small balances only are settled in specie.

By the mechanism of the foreign exchanges, goods are made to pay for goods, just as they are in the mechanism of the domestic exchanges. London used to be the clearing



house for the complicated offsets and transfers of international trade, and it was largely through London that the final gold balances were remitted. No doubt we shall see in the future a shift in the center for international payments. It would be rash to predict precisely to what extent they will cease to be settled through London, but there will probably ensue a considerable dispersion of the clearing transactions. Some will doubtless be effected through London, some through New York, some through Paris, some through Berlin, and eventually there will not fail to be interlocking arrangements between these several centers. But in any case, once the world is again settled in the ways of peace, the movement of specie will be insignificant as compared with the total volume of transactions. All this is so familiar that an apology is almost due for restating it.

Needless to say, also, exports pay for the imports. If there be a permanent excess of exports from a country—a so-called "favorable balance of trade,"—it exists simply because there are other things to pay for besides the imported goods, or (in the converse case) other things for which the people of a country have to receive payments than for their exported goods. For the forty years preceding the great war, we had in this country a great excess of exports, year after year; yet we all know there was a very slight inflow of specie. The exports of merchandise were simply the means by which we met sundry other obligations, such as interest on our debts contracted abroad, tourists' expenditures, remittances which newly arrived immigrants made to their relatives in foreign countries, and similar international debit items.

One of the most persistent forms which the popular misconception assumes is that of supposing that the balance of trade between one country and a single other country is of significance. Many think that if we buy more from Canadians than we sell to them, our trade with that country is a losing one. If, on the other hand, we sell more to Canadians

than we buy from them, they think it a profitable one.

The simple fact, familiar enough to persons conversant with international dealings, is that balances of this kind, one way or the other, are settled and disposed of by compensating dealings with other countries. When we bought more from Canadians than we sold to them, as we did half a century ago, we were enabled to effect our payments through exports to England. These supplied the basis for sterling exchange and served to settle our balances with Canada. In more recent years, precisely the converse has taken place. We have sold more to the Canadians than we have bought from them. But the Canadians have sent heavy exports to England, and they have also borrowed heavily in England; and it is their credits in England which have enabled them to pay for the goods which they have bought of us.

From South American countries and from the Far East we have bought, year in and year out, more than we have sold to them. We have been enabled to pay for the commodities thus bought because of our heavy exports to other countries, chiefly to Europe. The balance of trade between any pair of countries is rarely such as to bring about an equalization of their exports and imports. It is in the grand total of a country's transactions that we find the equalization of imports and exports, or rather the equalization of all of a country's international debts and credits; and it is this broad equalization which serves to bring about a settlement without the flow of specie.

Ending the Inflow of Gold

INCIDENTALLY, it may be pointed out that the great war, which has disrupted all international trade and all its mechanism, has brought unique consequences as regards this particular phase of dealings between nations. Although in times of peace the balance of trade between one country and any single other country signifies nothing and does not affect seriously the flow of specie between them, the case has become different, under the conditions of the present war, and particularly under the conditions which have developed since our own entry into the war. The balance between each pair of countries has come to be of moment. In times of peace Americans were able to pay for their heavy imports of coffee from Brazil or raw silk from Japan through credits based on heavy exports of breadstuffs and cotton and copper to European countries. London was the clearing house for these transactions, which were disposed of irrespective of the particular relations of the United States with Brazil and Japan.

But all this mechanism is now broken up. Our exports are largely on government account; and we get for them not credits in London upon which we can draw, but the promises to pay (the bonds) of foreign governments, which are tucked away in the United States Treasury vaults, and which for the time being are not available for any financial purpose. We must square accounts in Brazil

or Japan or Argentina in some other way. The export of specie to them takes place almost solely as a result of their special dealings with us. It may assume proportions quite unexpected and possibly embarrassing. But these are war problems, not peace problems; abnormal and temporary, and to be ignored in a consideration of permanent conditions and permanent policy.

The war has brought abnormal conditions in other ways. As I have just said, the usual machinery for the equalization and settlement of international payments has broken down. The United States, during the period of our neutrality, did receive great amounts of actual gold, in payment for extraordinary exports. Since our participation in the war, we have arranged to end this inflow of gold once for all, and to accept from our allies their promises to pay. And yet the previous flow of specie, astonishingly great as it was, lasting as it did for a period astonishingly long—for the first three years of the great war—illustrates the principles with which it seems to be in contrast.

We received unusual amounts of specie; but were we made richer thereby, or more prosperous? The result was higher prices, higher wages, higher cost of living, all the phenomena of inflation, all its attendants of feverish speculation. We should have been better off if we had received not the gold, but the things which we should ordinarily have received in payment for increased exports, namely, a heavier volume of imported commodities. Under ordinary conditions we should have received very little specie, but much coffee, sugar, spices, wool, tin, jute, sisal; doubtless

also more of finished manufactured goods, such as cottons, woollens, linens, and silks. It is the abundance of these commodities which signifies true prosperity. The influx of gold resulted simply in the cheapening of gold, that is, in a general rise of prices. It supplied the basis for an extension of credit which inaugurated the too familiar conditions of inflation. These have been accentuated since our own participation in the war; they still are stimulated largely by the great fund of specie which had come in before.

BUT, to repeat, these are abnormal conditions. Whatever the course and duration of the war, whatever the changed conditions of international trade which will ensue after peace, we must expect an eventual return to the normal conditions of peaceful trade. It is conceivable that a redistribution of specie among the different nations of the world will take place during the first year or two after peace; but, as before, the mechanism of foreign exchanges will again be at work, the flow of specie will be reduced to a minimum, exports will pay for imports. And it is obvious that in our consideration of the foreign trade of future years, we must have in mind these eventual conditions of peaceful exchange.

One further word on this general subject. The labor and capital which we put into our exported commodities serve to procure for us the imported commodities. That labor and that capital may be said with perfect accuracy to *produce* the imported commodities. In the same way, the labor which the Dakota farmers put into wheat growing procures for them, and may be said to produce for them,

the shoes, iron, and sugar which they buy from New England and Pennsylvania and Colorado; and the labor which the New England operatives put into manufacturing boots and textiles procures for them,—may be said to produce for them,—the wheat and flour which they buy.

The prosperity of any one geographical group depends both upon its turning out a large quantity of the immediate products of labor and upon its exchanging those products for other products. Our foreign trade, our combined imports and exports, promotes our prosperity as a people if we produce effectively and cheaply commodities which we export, and if we also exchange those exported commodities on advantageous terms for the imports. It is the first-named factor which is the more important; the gain which we secure from our foreign trade depends chiefly on the effectiveness with which we apply our labor to produce exports.

Now to this general proposition I would invite attention somewhat more carefully because on it hinges what I shall say concerning the way in which we should shape our commercial policy. Our foreign trade promotes our prosperity if we make our exported goods effectively and cheaply. The fundamental factor is the *effectiveness* of our labor and capital, and the cheapness with which we can consequently put our commodities at the disposal of foreign purchasers. By cheapness is meant, cheapness all things considered; quality as well as quantity, good quality as well as moderate price; or, if the price seem high, quality so good as to make the high price worth while. (Concluded on page 15)



An American has more than a traveler's interest in the fact that pigs are raised in the Orient. Your first impulse will be to say that this is a picture of five little pigs going to market in China. Translated into terms of foreign trade, however, it is a picture of bristles going to market, whence they will find their way to America and into the tooth brushes which all of us use. We pay for the bristles in part by sending chewing gum to the Chinese.

The Wheels Which Must Not Stop

The Industries Which Will Receive Preferential Treatment Because They Are of First Importance in War Time Defined and Classified

By **GEORGE N. PEEK**

Industrial Representative of the War Industries Board

IF I am asked the question, "How shall we keep normal industry going as usual and add the big factor of war industry," I confess frankly I do not know.

Let us assume that our normal business is 100 per cent. For this, existing facilities were taxed to the limit before the war. If to normal business we are to add say 25 per cent more, and our facilities have not been correspondingly increased, one of two courses must be followed: either we must increase our resources or we must shrink normal business to whatever extent is necessary to make room for war business.

To increase our resources is of course the more desirable, but owing to the demands upon the country for men, material and transportation to fight the great war, it is quite impossible.

The other alternative, therefore, admitting that war needs are supreme, is to shrink normal business to whatever extent the exigency demands.

It would seem comparatively simple to make a horizontal shrinkage in normal business to take care of the overload, but some normal business must be kept running to the full and even expanded beyond present proportions to meet war demands; for example, equipment and supplies for the railroads. It follows, therefore, that other industries not directly or indirectly necessary for the prosecution of the war must shrink.

For the purpose of defining those industries considered most vital for the prosecution of the war and the maintenance of public welfare, the following resolution was adopted on April 2 by the Priorities Board, consisting of the chairman of the War Industries Board, the Commissioner of Priorities, and representatives of the Food, Fuel, and Railway Administrations, the Shipping Board, the War Trade Board, the Army, the Navy, and the Allied Purchasing Commission:

BE IT RESOLVED by the Priorities Board, that for the guidance of all governmental agencies (in the supply and distribution of raw materials, finished products, electrical energy, fuel and transportation by rail, water, pipe lines and otherwise), there shall be prepared under the direction of and subject to the approval of the Priorities Board a list of

- (a) Industries arranged by classes.
- (b) Individual plants, whose operation as a war measure is of EXCEPTIONAL IMPORTANCE, and which shall be classified as far as practicable in the order of their relative urgency, measured by the extent of their direct and indirect contribution—
 - (1) Toward winning the war.
 - (2) Toward promoting the national welfare.

BE IT FURTHER RESOLVED, that in the compilation of the list of individual plants two factors shall control:

- (a) The relative urgency of the purpose or purposes, direct or indirect, for which the product of the plant is utilized;
- (b) The per cent of the product of the plant utilized in direct or indirect war work or work of exceptional and national importance.

BE IT FURTHER RESOLVED, that the said preference list be revised from month to month by and under the direction of the Priorities Board.

This list will suggest the character of plants

which will receive preferential treatment as necessary war activities. At the top of it stand ships, including destroyers and submarine chasers. Next come air craft, then munitions, military and naval supplies and operations, including building construction for Government needs and equipment for the same.

In their order follow fuel, divided into domestic consumption and manufacturing necessities named in the list:

Food and collateral industries—Foodstuffs for human consumption, and plants handling them; feeding stuffs for domestic fowls and animals, and plants handling them; all tools, utensils, implements, machinery and equipment required for production, harvesting and distribution, milling, preparing, canning and refining foods and feeds, such as seeds of foods and feeds, binder twine, and so on; products of collateral industries, such as fertilizer, fertilizer ingredients, insecticides and fungicides; containers for foods and feeds collateral products; materials and equipment for preservation of foods and feeds, such as ammonia and other refrigeration supplies, including ice;

Clothing for civilian population;

Railroad or other necessary transportation equipment, including water transportation;

Public utilities serving war industries, Army, Navy and civilian population.

This general classification of industries demanding preferential treatment includes in each case all necessary raw materials, partially manufactured parts and supplies for the completion of products.

Now as to the non-war industries in the activities of which must be made those adjustments necessary to conserve the field of war industry. Those adjustments will mean the curtailing of the operation of the non-war industries, or, as an alternative, encouraging non-war industries so to change their operations as to produce war needs, and to that extent convert them into war industries.

Responsibility rests largely with business men engaged in the non-war industries who find themselves unable to operate to capacity. This is their problem more than it is the problem of the Government. Business men must not sit back and wait for Government officials to make constructive suggestions as to how their industry may be operated during the war. The initiative must be taken by them. It is folly for business men to make suggestions which are selfish or which are not based on the good of the country as a whole. Constructive suggestions, however, will meet most favorable consideration.

The Whole Industry

IN procuring the enormous quantities of materials and supplies needed in the war, and in the conversion of industry from non-war to war purposes, the Government needs and welcomes the active assistance and cooperation of business men, that it may have the benefit of their knowledge and experience to the fullest extent. If we are to have a strong industrial country after the war we must start now to put our industries in shape.

Manufacturers with kindred interests, without infringement of existing laws, should consider problems of mutual concern. The aim should be to preserve the structure of each industry, not one manufacturer against another, one city against another, nor one state against another—but the industry itself, regardless of ownership or location.

The Requirements Division

IT is physically impossible for us in Washington to treat with each individual manufacturer in each line of industry. Valuable information concerning the industry as a whole is seldom obtainable from the individual manufacturer.

The war service committees of each industry form the best point of contact between the Government and the individual manufacturer, and can do much to assist the Government in its problems, and at the same time to strengthen the industry itself. A noteworthy example is that of the wood-working industry, made up of several hundred manufacturers of furniture, sash, doors, and so on, and represented in Washington by its chairman, Mr. Schrevesaande. Through his efforts the Government has been able to place orders for many millions of dollars for parts for army vehicles, thus relieving the overloaded wagon manufacturers, and at the same time helping out the wood-working industries which had been seriously affected by conditions recently existing.

Since Mr. Baruch was appointed chairman of the War Industries Board by the President, he has given much time and attention to the organization of the board in a manner calculated to secure more complete cooperation between the various purchasing departments of the Government and the industries of the country. I will outline this plan briefly.

The fundamental necessity for intelligent action by the board is a knowledge of the Government's requirements as far in advance as possible; and in order to acquire this knowledge there has been formed a Requirements Division of the War Industries Board, to which the various departments of the Government and the Allied Purchasing Commission bring their requirements as soon as they are known.

These requirements are briefly considered by the Requirements Division and passed directly to the commodity sections of the War Industries Board interested in the particular requirements. These sections were created to handle raw materials and finished products of which there is an actual or threatened shortage, or the price and production of which should be controlled, in order that the United States Government, its allies, and the civilian population, may be protected as far as possible.

When the requirements deal with the commodity listed where a shortage exists or where an allocation seems desirable, but for which no regular section has been established, such requirements will be considered by a special section created for such purpose by the Requirements Division, and this special section shall perform the same functions as are performed by the regular commodity section.

Each section chief is charged with the



These are the lights of Industry. They must be kept burning. They are out in Belgium. They are out in Russia. They flicker but still burn in France and England. But here, across 3,000 miles of ocean, they must and shall burn bright and steady. Europe has passed us the torch

responsibility of collecting from the several departments of the Government, from the manufacturers and from committees representing them, and especially from the War Service Committees created under the supervision of the Chamber of Commerce of the United States, and from any and all other reliable and available sources, information concerning the production of the particular commodity or commodities with which his section has to deal, including available supplies, new sources of supply, methods for increasing production, and so forth.

Control Through Allotments

EACH commodity section shall consider market conditions pertaining to the material or commodity over which it has jurisdiction, and shall, where deemed advisable, recommend purchase plans to the several purchasing departments. Where it becomes necessary to control orders in whole or in part by means of allotments, this section will determine the allotment of materials, commodities and facilities to the several departments of the Government and to its allies, and also the extent to which manufacturers and others, whether serving the civilian population or engaged in the manufacture of war supplies, shall be rationed.

The various Government purchasing agencies will continue to make the contracts and place orders as heretofore.

While it is impossible to cover this subject fully in so short a space, I have, at least, outlined some of the present activities of the War Industries Board and indicated its

desire to secure the continued cooperation of the business men of the country.

Foreign Trade Will Promote Our Prosperity

(Concluded from page 13)

Sometimes the needs of other peoples are satisfied by giving them large quantities of goods of poor quality at a low price; and a considerable part of the export trade of England and Germany is secured in this way.

The exports from the United States have usually been good rather than cheap—not so much low in price, as good in quality and moderate price. But in any case it is the effectiveness of our industrial powers in producing a thing which is cheap in comparison with its quality, that underlies all prosperous foreign trade. The very existence and maintenance of exports rest on this basis. All trade promotion, all banking and transportation facilities, all the trade agents and embassies, all the agitation, all patriotic devotion, avail nothing if this fundamental factor be lacking.

The effectiveness of labor and capital mean something different from that which is usually implied by the word "efficiency." "Efficiency," as that term is often used, refers to special and individual skill, intelligence, and activity on the part of the individual workman, to his mental endowment or personal aptitudes or muscular strength. Now, it is true that the high standard of living and the greater spirit of activity in this country do bring it about that our workmen are, man for man, more efficient than those of foreign coun-

tries. But it is not solely, or even primarily, efficiency in this limited sense that I have in mind when speaking of the effectiveness of our labor and capital.

I refer to the cumulative influence of all the factors which combine to bring about the final production and final putting on the market of the exported commodities. The factors are many and diverse; not only the individual efficiency of the men, but ingenuity on the part of inventors and engineers in perfecting machinery, skill in the designing and organization of plants, brains and enterprise in management, intelligence in the distribution and sale of the goods.

No small part is played by transportation, and especially by inland transportation. Whatever may be charged against our railways, they have succeeded in cheapening transportation immensely, especially in long-distance hauls, and they have been a powerful factor in increasing the effectiveness of the total labor of the industrial processes. And, throughout, the thing which probably tells most of all in assuring a combined effectiveness of our labor and capital is industrial leadership. It is this which has made the modern economic world.

EDITOR'S NOTE—This is the first portion of a study of the economics of foreign trade. In our issue for June, Dr. Taussig will continue his exposition of the subject by examining, from the point of view of the economist, certain devices for the promotion of foreign trade.

ENGLAND has now a national salvage council, the chief purpose of which is to prevent any waste which will conserve internal resources and relieve the use of ocean tonnage for importing new materials.

Employer and Employee Plus Understanding

Give Labor as Much Thought as Finance and Markets, if We are to Establish Industrial Relations on a Business Basis and Maintain War-Time Production

By L. C. MARSHALL

Of the University of Chicago

WHAT should the employer do to maintain war-time production? There is neither time nor occasion for weak sentimentality with respect to this absolute necessity. Unless our war-time production is maintained we face defeat and disaster. From the point of view of the employer, the question at issue is fundamentally one of business administration. All of us are of course influenced by the fact that the administration of labor is in large part an administration of human relationships. None the less, this is a case where that administration should be primarily in terms of business results and not in vague terms of "uplift" or "welfare" if a permanently successful outcome is to be expected. Fortunately, good business results and proper consideration of the human element go hand in hand.

The question "how can we maintain war-time production?" assumes, by its very asking, that something is wrong. It assumes that from the point of view of the employer a certain amount of demoralization has occurred with respect to labor. If we are to discuss what the employer should do in view of this demoralization which has taken place, it is clearly expedient that we determine its causes. An analysis of causes will in itself serve to indicate the character of the remedies which should be applied.

The problems which faced our national leaders upon our entry into the war were literally staggering. Conditions in the Ordnance Department may be taken as an example of the difficulties involved. These conditions were duplicated, with mere differences of degree, in the Quartermaster Corps, the Signal Corps, the Medical Corps, the Navy, the Shipping Board, and all our other so-called production departments.

At the outbreak of the war, the Ordnance Department had on duty nine commissioned officers at Washington and a total of 97 in the entire country. Its expenditures in peace-time had been about \$13,000,000 per annum. From this nucleus there was developed in one year a staff at Washington consisting of 3000 officers, 1700 enlisted men and 9200 civilians, with a total of 5000

officers in this country and abroad. This mushroom staff had charge of direct appropriations and contract authorizations amounting to almost five billion dollars; it set up the mechanism for controlling the production of this quantity of material, for of course it could not be procured on the open market and its production had to be supervised; it provided the administrative forces for storing and handling, both in this country and abroad, the material when it had been produced and delivered.

The country demanded results. In the absence of coordinating supervision at the top, it seemed clear to the average production officer that his patriotic mission, to say nothing of his chances of preferment and promotion, began and ended in his pushing his own programme through. He accordingly placed his emphasis on grinding out contracts for vast quantities of materials,—an emphasis which the contractors themselves were not averse to stimulating. Under such conditions, one can well believe that carloads of hull paint were delivered at shipyards where the ways had not yet been laid on which the hulls were to be constructed. The nation's resources, unadjusted as they were, could not meet adequately such haphazard demands.

Since there was little or no guidance from the top, since the industries and labor resources of the country had never been effectively catalogued and classified for military purposes, since war contracts of European nations had been centered in certain districts, and since the successful business managers and engineers called into the Government service came mainly from the industrial districts of the country, the outcome of the zeal of the contracting officers was a tremendous concentration of contracts. When stock could be taken of the situation, it was discovered that, aside from the contracts of the Shipping Board, over one-fourth of all the Government contracts for

war purposes had been located in the state of New York alone, over one-half in three states (New York, Pennsylvania, and Ohio), and over three-fourths in seven states, (New York, Pennsylvania, Ohio, Massachusetts, Illinois, New Jersey, and Connecticut).

These war industry districts rapidly extended existing plants and created new plants. They reached out to the rest of the nation for materials, money and men. They experienced a tremendous congestion of transportation facilities,—a congestion that was later to play its part in causing the issuance of a fuel order which was really an order to relieve an industrial jam. They required that scores of thousands of workers be transferred to them from districts where war work was not being done.

Certain features of this confusion operated particularly to the disruption of satisfactory labor conditions. In our industrial system, the standard mechanism for inducing laborers to move is that of an offer of higher wages. This offer was readily forthcoming from the contractors in war industries, particularly from those who held "cost-plus-percentage" contracts, which made it actually to the profit of the employer to pay high wages to his workers. War contractors "bid away" from ordinary industries their skilled workers, disrupting in so doing some of the basic industries of the country, and then bid against each other for these workers. The lack of general planning, or indeed of general knowledge of the turn events were taking, caused wages to rise very irregularly in the various trades affected, in the communities affected, and even in the different industrial plants within a given community.

They "Milled Around Like Cattle"

TO this hectic wage situation there must be added the fact that we did not have a satisfactory system of employment exchanges through whose activities the movement of workers could take place in an orderly fashion according to carefully determined requirements. The result was that the movement occurred in a highly disorderly fashion, guided, if such a term may be used, by newspaper advertisements of private industries, wild rumors of high wages in some distant locality, and patriotic desire to be of service by working in some war industry. A plant manager in one of these war industry towns said that "for weeks laborers milled around like cattle" in his town. The story is told of one community in which an investigator met incoming trains and watched workers accept employment in as many as six to ten plants in the same day, moving from one to the other in the hope of ever higher wages and accepting employment in every one whose wage offer was larger than that of its predecessor.

High wages are alleged to have contributed to the demoralization of labor in another way. Reports are numerous that workers have stayed away from their tasks some days of the week because they were making what they regarded as a satisfactory living by working



the other days for higher wages. One plant reported that it had to maintain a payroll of 10,000 in order to have an average of 9000 report for work daily.

This restless movement of workers from place to place was stimulated by the fact that in some plants hasty construction or hasty extension had resulted in unsatisfactory or even dangerous working conditions, so that workers were unwilling to remain for long periods in the employ of these plants. These appear, however, to have been exceptional cases. A much more general cause of restless movement lay in the fact that when workers arrived in the congested districts, they found that satisfactory housing facilities did not exist and that the local communities were unwilling or unable to provide the necessary housing facilities.

The conditions thus far recounted would have been sufficient in themselves to account for a great increase in labor turnover and in labor unrest. There were, however, other factors contributing to the same end. There was the suspicion of profiteering, a suspicion that all of us know was well grounded in too many cases. From the basis of these cases, wild rumors spread and the working man, seeing too frequently tangible evidences of ostentation and display on the part of his employer, came to feel that the scales of justice were not even,—came to suspect even the hundreds of patriotic employers who were producing war materials at only a reasonable profit.

There was also spread abroad a rumor that a large fund was being raised by a certain group of capitalists with which to wage a campaign against organized labor, and the things for which organized labor stood. It was honestly believed by no small section of the labor community that certain employers intended to use the war situation as an opportunity to fight social insurance, minimum wage, protective labor laws, and the other devices designed for the security of the worker.

We must remember that the position of the worker in modern industrial society has very

many elements of insecurity, and that the worker will be jealous of any interference with institutions and structures which have emerged, tending to make his position more secure. There can be no question concerning his present insecurity. Being dependent in the sense that he works for hire, it is not too broad a generalization to say that everything which makes for uncertainty in business operations makes for the uncertainty of the worker in that it jeopardizes his employment. Quite aside from the risk of unemployment, however, the worker of today has risks of industrial accident and industrial disease, which were unknown before the coming in of modern technological industry. It is not surprising that the worker is exceedingly sensitive of any attempt or apparent attempt on the part of the employer or of anyone else to interfere with such devices as the minimum wage, social insurance, and the trade union, which tend to make his position in modern society more secure.

It was not necessary for these rumors to be founded in fact. They were widely believed and there was no agency, either Governmental or private, which was concerned in preventing their spread by the publication of the truth.

The foregoing is of course only a fragmentary sketch of the conditions which were unfavorably affecting labor in production. It is sufficient, however, to make readily understandable the great increase in labor turnover and the very considerable increase in labor unrest and in industrial disputes. There is, of course, no such thing as a "normal" labor turnover. Some writers have estimated that a labor turnover of 100 per cent per year represents average conditions. In these war industry plants, a labor turnover of 400 or 500 per cent was regarded low, and one of 1600 to 2000 per cent was by no means phenomenal. As for industrial disputes in the early months of the war, they were three times as numerous as in the corresponding period of the preceding year. It certainly may not be assumed, however, that the fault for unsatisfactory labor conditions rested ex-

clusively with the worker. In very large part, the fault lay with the lack of centralization of administration in the producing departments of our Government. In very large part it lay with the American business man who has not yet come quite to the point where he treats labor as a real factor in production, worthy of the thought and attention given to such other factors as finance and marketing.

Wanted—A National Labor Policy

WHAT could be done in the situation? Various lines of action were possible. It was, of course, conceivable that we should follow the British experience and establish a Ministry of Munitions or something corresponding thereto, which would gather the production activities of the Government into one department and have this department administer labor in production. Such a course of procedure would have been the part of plain business sense. For some reason, however, our national administration was unwilling to adopt this procedure.

Another possibility was that existing labor agencies should deal with the situation, but this possibility savored largely of impossibility. The state bureaus of labor were not organized on a basis which would make effective action probable, and in any event they could not deal with the situation in a nationwide manner. The federal Department of Labor was little more than a miscellaneous collection of bureaus inherited from the parent Department of Commerce and Labor. It did not have the kind of contact with production which successful business administration would require, and it had not been authorized to establish such contact.

A third possibility—perhaps it is more accurate to term this an impossibility also—was to leave the matter to "public sentiment" in the hope that there would gradually emerge a war labor policy which could be administered more or less as a matter of course in the individual industrial plants. The difficulty with this suggestion was that the conflicting action of our produc- (Continued on page 76)

Work Like Blazes The Workers Have Taken Their Own Says Labor to Labor Slackers in Hand, Imposed Their Own Discipline, Shouldered Their Re- sponsibility, and Are Playing the Game

By MEYER BLOOMFIELD

Head, Industrial Service Department, Emergency Fleet Corporation

I HAVE just come from a tour of all the shipyards of the Pacific Coast, from Los Angeles to Seattle, having not only spent hours in the yards, but days in conference with citizens' committees, the different chambers of commerce, the different chamber committees, and the representatives of all the shipyards in every city, the bankers, ship-builders and others interested in this one supreme problem of the present hour.

What about the Pacific Coast in ship-building? The Pacific Coast is building ships. It is building ships fast and well. The most inspiring fact which I came upon in the entire visit is the spirit of labor on the Pacific Coast.

Here are three or four items by way of evidence. In the first place, the Union Iron

Works, through its manager, had suggested a bet of \$20,000 against the management of a sister plant at Fall River in Massachusetts. When the employees heard of that wager in San Francisco, they insisted and succeeded in taking the bet off the hands of the management and raising the \$20,000 among themselves. This is what the ship builders write to our district office in Portland:

We herewith inclose check for \$10,000. Members of our force desire to bet this amount that this company can deliver more completed wooden steamers within the next 12 months, exclusive of vessels now in the water, than any other yard or yards putting up a like sum; or stake this amount on the time it takes our yard to complete one wooden steamer as against any other yard or yards putting up a like sum of money.

I have a mass of letters written to me by workmen while I was on the Pacific Coast. They are crude, inarticulate almost, but the men took it upon themselves to write, and what is the burden of their complaint? "We have not enough work to do." There has been some delay in material, perhaps; a turbine held up on the road; material flagged somewhere, and perhaps forgotten. The men apparently, from all the evidence, want not only to do their bit, but, as Mr. Hurley recently put it, "Do their all."

We had heard some months ago in the east disquieting rumors as to labor conditions on the coast. We had often heard the names of some of the men who were perhaps too widely advertised as trouble makers. It was my good fortune recently, when presiding at the

Union Iron Works liberty exercises, after four or five thousand men in overalls standing on the street had stretched out their right hands toward the flag—in taking the oath of allegiance to the flag—it was my privilege to hear these words from a man, whom we in the East had come to regard as a trouble maker. I want to repeat the language because I doubt that any representative of the Government could ever use such language in addressing workmen, or would be as effective as this man was. Here is what he said, speaking first of the men in the trenches:

The men represented by each of these stars are not receiving double pay for overtime, and they are not laying off on Monday morning because they were out late on Sunday night; and they are not laying off because they were drunk the night before; and if they did, you know what the consequences were. There is no labor representative to speak in their behalf. It would be a court martial for them. Some of them are to-day wading up to their waists in water, and they are willing to go there and lay down their lives so that you and I may be free, and that democracy may prevail over all this entire world. But in recompense for this they ask something of you.

If you men who are here who on last Saturday morning in this yard, like dirty slackers that you are, jumped over that fence to get by,—if you are a member of the organization that I represent, you will be expelled from the organization. You have no right to lay down on the job, and you have no right to come down here and shoot craps; and some of you have done it. The poor devils in France today can't afford to shoot craps. They can't make any demands for overtime or for anything else. Many of you, five minutes before the whistle blows, dodge the foreman to see if you can beat them out of another five minutes. You will have to work while this war is on, and you will have to work like blazes.

And they cheered him.

As if to take down the Pacific Coast for a bit, I happened upon one of our most efficient, patriotic shipbuilders, and I intercepted a telegram which he received. Here is the telegram:

Mr. Holden Evans—he is the president of the Baltimore Dry Dock & Shipbuilding Company—The New York papers Sunday made much of what was called a record rivet drive at Port Newark yards stating that with an extra heater boy and an extra passer boy the gang drove 1967 rivets in 19 hours. We believe that we have the fastest rivetting gang in the world, and stand ready to prove it. On April 9 Charles Shark and his gang, with extra heater boy and extra passer boy, drove in 9 hours 2720 three-quarter snap

rivets in floors of 88 tonners. This report has been verified by the fleet corporation representative.

I believe that this is the world's record in driving rivets. Now, a few words about the man power situation: In October when we began to keep records of the number of men employed in our shipyards, there were 102,000 employees. On April 6, a few days ago, there were 270,000 employed in the shipyards of this coun-



These industrial soldiers are as much in the service of the nation for war as if their overalls were a uniform and their tools the rifle or the machine gun. They must be housed and cared for and fitted with care to their respective jobs. With them rests the issue of the war; for with them rests the task of making the great bridge we must build to Europe

try. We keep a weekly man-power audit of every shipyard; the daily attendance record of every shipyard. What the weather did to us in the East last winter can best be seen by the fact that the daily attendance in many of the Delaware River shipyards fell off to 50 per cent. On the Atlantic Coast from last November to date, and on the Pacific Coast, the daily attendance has been around 90 per cent.

Now this building up of the shipyard labor force—building up north, south, east and west, with equal progress and energy, is not an unmixed good. When you dilute an industry to this extent, you must expect a slowing down

for the time being because there are not shipbuilders enough alive to man yards to the quota we need. This means processes of initiation, of instruction. This means using the utmost wisdom in recruiting labor; utmost wisdom in supervising that work while it is going on. By centralizing all shipyard employment in Seattle by agreement among the ship builders to use a public labor exchange where craftsmen do the selecting of men for the shipyards, the turn-over of labor in the shipyards there has dropped enormously; the waste of time in looking for a job or in going from

gate to gate has been eliminated. In this connection I wish to do justice to the work of Mr. Silcox there by mentioning his name and calling attention to what is possible when intelligence, cooperation, and team-play are established.

Only two of the yards that I saw on the Pacific Coast could be

spoken of as old yards, and yet they have multiplied their ways from a few to many, so that they will turn out 400 ships on the coast. I have seen shipyards on which the production will be 40,000 tons per way per year.

That is efficiency that has never before been reached in the shipbuilding history of the world. They are doing it now. They are also doing it in some of the yards on the Atlantic Coast. What is doing it?

It is honest, frank, unqualified cooperation between the management and the men. I have found rules in the Tacoma yards that the organizations to which the men themselves belong fine a man one dollar for first offense and five dollars for the second offense if he is convicted of slacking on the job. For this rea-

son there was very little in all my trip, of what might be called preventable loafing. When men have to wait for material or for tools or for air power, that is a problem for the management to solve, and the managers are trying to solve it better and better. But when men skulk and don't do their bit, everybody must take a hand in the discipline of these men. Every shipyard worker is now working for the Government. And this Government expects humane treatment, fair play, and recognition of manhood in foreman, manager, rivetter, and heater boy. This is a great promise for a great spirit; for more spirit; for more energy; for more ships.

Lighting the Way For Payers of War Taxes

How Business Men, Working With Treasury Officials, Have Helped to Interpret the Law Under Which We Will Raise Increased Government Revenues

By WALLACE D. SIMMONS

Chairman, Committee on War Finance, Chamber of Commerce of the United States

CERTAIN American manufacturers found themselves trying to hold a dilemma by the horns, a feat more difficult, according to Lowell, than holding a wolf by the ears. On one side were high war taxes to pay; on the other, increased demands for capital to finance the making of war materials. There was danger that after paying the taxes, some manufacturers might not be able to get the means to carry on their operations. To relieve the situation, the Government created the War Finance Corporation. What business men think of this new machinery, and of methods of levying war taxes, is the interesting story told by Mr. Simmons, who speaks as chairman of the War Finance Committee of the Chamber of Commerce of the United States.—The Editor.

THE War Finance Committee has devoted its attention chiefly to two subjects—taxes, and the proposed \$500,000,000 War Finance Corporation.

We began our consideration of the latter measure with many misgivings as to the desirability of several of its features, but thorough analysis of the questions involved and thorough debate upon them led us to the unanimous conclusion that the bill was well calculated to accomplish what it was designed to accomplish.

We found that wherever there were objections to particular features there were also greater objections to the only possible alternatives, and that in the end the methods and means proposed were, under the circumstances, better calculated to get the best results obtainable than any others that had been offered.

As in all matters of legislation, particularly in a representative form of government, it was not a question of getting the ideal, but one of compromise, of utilizing the facilities that were available, as well as avoiding the pitfalls found in any other path which might be taken toward the same goal.

With reference to the problem of war taxes, we found a much more complex situation. While we succeeded in reaching a unanimous conclusion, and one which was satisfactory to all members of the committee, it was only after several days and nights of thorough discussion of practically all of the questions then before Congress, or which we thought it advisable to suggest for consideration.

There are many theories on which war taxes may be levied, and it would take more than the space allotted to discuss questions of theory or bases on which our war taxes might be apportioned. I think we need to give attention only to the two which have been advocated by the Senate and by the House respectively, and which were finally combined in one statute, although in many respects they do not mix much better than oil and water.

The House bill, which based the amounts of war taxes upon earnings in proportion to invested capital, had in it very apparently great difficulties and complications of ad-

ministration. The one problem of fixing invested capital for every one of the many thousands of firms in the United States and according to one rule or policy was, from the administrative standpoint, a task so sizeable as to make even the most courageous of those who understood it hesitate to recommend a measure involving such an undertaking.

The Senate committee, being much impressed by the administrative difficulties involved in the House plan, took up the English idea of basing war taxes upon earnings during the war as they compared with those of a pre-war period.

A Basis For Your Taxes

OUR committee learned through correspondence with members of the Chamber that, while the statistics submitted to the Senate Finance Committee showed that the general average of earnings throughout the country during this pre-war period was about normal, in some states these were either years of calamity or of considerably less than average earnings. Therefore any plan which took these years as a standard of normal earnings in the United States would result in great hardship to the people of certain sections where, because of local conditions, earnings had been much below the average, if there had been any earnings at all.

This was in distinct contrast to the effect of the same plan as it was worked out for the firms doing business in England. English business being very largely dependent upon export and import, is much more even year in and year out, because it takes in practically the entire world.

As a matter of fact, the pre-war period was taken as the basis for English taxes because in those years business in England generally had been quite prosperous. It was recognized that if progressive war taxes were to begin after these firms had made as much money as they had made during these pre-war years, they would be allotted very liberal earnings and in fact unusual prosperity, before paying any war taxes at all.

In the attempt to harmonize the plans of the House and the Senate, these features were pointed out and the objections to both plans vigorously argued. However, the advocates of each held so tenaciously to their own ideas that it was found impossible to come together on any plan which followed either one line or the other. As a result, the law was enacted in a form which was termed a compromise. It was an attempt to combine two plans diametrically opposed to each other, and the result was most confusing, presenting administrative difficulties appalling to contemplate.

The Commissioner of Internal Revenue, Daniel C. Roper, recognized the difficulties involved in the interpretations and rulings which would have to be worked out in order to make this "hodge podge" law workable and equitable, to prevent it from doing great injury to certain industries, and from bringing calamitous results upon the country. As there is no provision in our laws for a board with authority to do anything of this kind, the Commissioner resorted to the appointment of a group of advisers. He selected, and at his request the Secretary of the Treasury appointed, nine men representative of various callings and industries, two of them being selected from the War Finance Committee.

The task of this Excess Profits Board has been a very long and tedious one, but it has been well done, as a patriotic duty, with a thoroughness and a degree of constant application that leaves no room for question as to the readiness of all business men of the country to do their full share of war work.

The more one studies what has been done by the Excess Profits Advisers the more one will, I believe, see the wisdom of their appointment and the real value of their work. What looked like an almost hopeless proposition has been made, by interpretation, workable and equitable beyond all hopes. The recent appointment of a Board of Review, including the same men, gives assurance of the continuance of the policy which characterized the advisers' rulings and which avoided the disastrous results that would have ruined several industries which are of vital importance at this time.

THE Sherman Act had a little more interpretation from the Supreme Court in March. The Department of Justice had taken the position that the Chicago Board of Trade had done an illegal act when it adopted a rule to the effect that, after the session had closed, members should during the rest of the day make bids for grain "to arrive" only at the closing price of the session.

The court did not agree with the department. It said the legality of an agreement cannot be determined by so simple a test as that it restrains competition. "The true test of legality," it remarked, "is whether the restraint imposed is such as merely regulates and perhaps thereby promotes competition or is such as may suppress or even destroy competition. To determine that question the court must ordinarily consider the facts peculiar to the business to which the restraint is applied, its condition before and after the restraint was imposed, the nature of the restraint, and its effect, actual or probable." The conclusion was that the restraint in question helped to improve market conditions.



Business and the First Year of the War

Organized Effort Has Done Much in Marshaling Every Economic Resource to the Nation's Need

RESOLVED, That the Chamber of Commerce of the United States, in convention assembled, voicing the sentiment of the business men of every State in the Union, expresses to the President of the United States its profound appreciation of the gravity of the international difficulties which now confront the Nation and solemnly pledges them to stand as one behind him in patriotic purpose, whatever the eventuality."

THAT pronouncement came from the Fifth Annual Meeting of the Chamber of Commerce of the United States on the day when it was announced that Germany had adopted a policy of unrestricted submarine warfare.

On the day following, President Rhett, who had just been re-elected for a second term, called upon the Secretary of War and offered to him unreservedly all of the facilities of the organization of the Chamber of Commerce of the United States for such use and assistance as could be made of it. Secretary Baker expressed his appreciation of this tender of service, intimated that there would certainly be work for the Chamber to undertake at an early date, and showed then his understanding of the vital part that industry and commerce must play in winning a war conducted not as in the past between armies, but between nations as a whole. It was not long after this that he assigned to the National Chamber a specific task, and the war work of the Chamber began.

In so expressing its patriotic purpose and tendering all its resources, the Chamber of Commerce of the United States was but one of thousands of organizations; in fact, the impulse in this direction was well nigh universal on the part of associations and individuals. The National Chamber, however, through its completed organization had specific facilities to offer which were unmatched. Fortunately for this country, five years before, on the call of the chief executive of the nation, the business men of the country had instituted a federation of American business along thoroughly democratic and representative lines, which in these five years had established its working connections with the leading business and trade associations in every state, territory and dependency, and had so far functioned that its position was established and recognized not only by its own constituency, but by the executive and legislative branches of the government as well.

It was obvious at the start that while organized business could greatly assist other forces in the general lines of government war endeavor, its chief function and aid would lie in mobilizing industry and trade to meet war demands, and establishing and securing recognition for those principles which, however they might circumscribe normal business activity and require sacrifice, were necessary to the carrying out of the Government's military purposes. The first assignment given the Chamber by the Secretary of War fully recognized this fact and was for the purpose of assisting and expanding the usefulness of the

pre-war organization for purchasing supplies.

Purchase of supplies under the Quartermaster General of the Army was carried on through the long established system of specifications and bids. For issuing specifications drawn up in Washington and for receiving and awarding bids, the system was de-centralized and carried out through depot quartermasters located in different parts of the country. On request of the Secretary of War and through the Chamber's Committee on National Defense, advisory committees on purchase of army supplies, made up of business men of wide experience, were quickly established in each of the fifteen cities where depot quartermasters were located, and immediately began to operate. They dealt with specifications and with the need for broadening them in many cases to include the article which was on the market and available rather than that which had to be specially manufactured. They drew up extensive lists of those throughout the territory who should bid on Government specifications—and would do so in war time although usually not seeking Government business, thus immensely broadening the Government's market. In certain communities where the Government purchasing bureaus were hampered by failure of Congress to pass appropriation measures, the committees were able to arrange with bankers for loans amounting to millions. They functioned differently in different territories according to the Government's needs in those territories and the amount of cooperation which the depot quartermaster was willing to seek or accept. But their service everywhere proved of immense value, and was continued until the method of purchasing was altered to meet war exigencies through a vast increase in the system of centralized buying, when they were released with the thanks of the Secretary of War.

A Means of Mobilizing Industry

AT a meeting called in Washington of the chairmen or vice-chairmen of these fifteen committees, in which every one of them without exception was represented, although it called for the attendance of active business men who had to come from the Pacific Coast and the Mexican border, a brief in regard to principles of Government purchasing, based on the experience that the committees had had and pointing out defects in the existing system, was drawn up and transmitted to the War Department.

Coincidentally with its activity the Chamber offered its services to the Council of National Defense in the mobilization of the industries, to meet centralized purchasing, secure the necessary production, establish fair prices and provide for an equitable distribution of orders throughout the industries. This appeared to us to call for the establishment of committees truly representative of each industry, which should be fully informed and ready to present the facts to, and cooperate with, the Government purchasing authorities. This plan was at first favorably received and members of the Chamber's staff were put to

work as soon as a schedule of articles to be purchased was made available, with a view to matching up these articles with the various industries and the existing organizations of these industries. It seemed unbelievable that the Government would not avail itself of the machinery to this end provided by the national trade organizations of industries already in existence and to a very large extent representative and efficient. To ignore these existing agencies representing industries would be to incur a feeling of lack of proper recognition and a consequent lessening of enthusiasm in cooperation.

The plan which the Chamber laid before officials of the Council was to proceed to the organization of representative committees by degrees, selecting first those industries which the chart of materials wanted showed would be first and heaviest called upon. From its knowledge of the trade organizations the Chamber would advise the Government authorities of the proper officials thereof to call into consultation with a view to selecting a small committee that would secure the largest recognition from the trade and best represent its conditions. Meanwhile, however, the Council of National Defense had apportioned administrative functions to members of its Advisory Commission, placing in the hands of one the matter of the purchase of finished products and of another the matter of the purchase of raw materials. It soon became evident that these did not recognize the desirability of using the National Chamber as an agency for getting in touch with organized industry, and further that they either hesitated to deal with existing organizations of industries or felt that the purpose could be as well or better accomplished through their own selection of committees.

With the work of the Chamber well begun, the function of organizing the industries was suddenly transferred from the Council of National Defense and its Advisory Commission to the Department of Commerce and its Bureau of Foreign and Domestic Commerce, accompanied by a request that all lists that the Chamber had prepared should be transmitted to that Bureau. This request was immediately complied with, and the Bureau proceeded to call in secretaries of national trade organizations to consult with them regarding the organization of committees. Equally suddenly and with the lapse of about ten days, however, the function of organizing industrial committees was transferred back to the Council of National Defense and conferred again upon particular members of the Advisory Commission.

The Chamber was not in a position to be of much aid in this matter to the members of the Advisory Commission, in charge of raw materials, because of the lack of national organization among raw material producers, but it felt it was in a position to aid in organizing committees to represent the manufactured articles. On request a list of representative men in a number of the most important industries upon which the largest demand was to be made was submitted, ac-

accompanied by an offer to continue with the other industries along the same line.

No use whatever was made of these lists, and, in preference to dealing with existing trade organizations, the officials mentioned proceeded to secure committees of industries by personal selection and on the advice of individuals. In this manner over one hundred industrial committees of the Council of National Defense were organized and proceeded to function as a part—an official or semi-official part—of the Council in the arrangement for purchases.

Much was accomplished in securing needed supplies through the participation of these committees, which, in the main, proved effective, disinterested and willing to concur in the necessary industrial sacrifices. Difficulties arose, however, through this form of organization, which certainly should have been foreseen. To secure the prompt and quantity production which was essential, it was necessary in certain cases that purchases should be made from firms or industries in which members of these committees were interested—an essential weakness of the plan of having members of the Advisory Commission of the Council select the individuals to serve on the committees and give them actual participation in the negotiations as to price and distribution. This weakness of the system gave rise to unfortunate and, so far as we are aware, unfounded rumors which came into Congress and led to discussion there. Members of committees found themselves placed, through no action or fault of their own, in a most awkward position, and continued only through a desire to serve the country in an emergency. The passage of legislation by Congress requiring that any committee member should declare his full interest in any concern with which the committee was dealing with a view to Government purchases, brought a full realization to the Council of the necessity of complete reorganization.

At the War Convention of American business, in Atlantic City last September, Mr. Walter S. Gifford, Director of the Council of National Defense, gave notice of the abandonment of the existing committee system and invited the Chamber to cooperate through the formation of committees representative of the industries, which should deal with the Government but should not be in any possible sense a part of the government. The necessary authority was given by resolution of the Convention and the Chamber, through its War Committee, proceeded immediately to the formation of committees through the agency of the trade associations. It required, however, that before the official stamp of the Chamber should be given to these committees they should be made representative of the entire industry and not merely of those parts of the industry already represented in the organization, this arrangement to last for the period of the war only. The Council of National Defense subsequently formally asked the Chamber to proceed with this organization. On December 12 the chairmen of all organized committees were called in meeting in Washington, where they were addressed by officials of the War Industries Board, the Council, the Fuel Ad-

ministration, and others, and where they proceeded by resolution to lay down a plan of organization, calling upon the War Committee of the Chamber to operate as the centralizing agency and to place its stamp of approval on committees when properly organized. At the present time over one hundred and fifty such committees have been organized ready for action, many of them have been called upon by the Government authorities, such as officials of the War Industries Board, the Commercial Economy Board, the Fuel Administration, and the War Trade Board, for conference; while it is gratifying

tunities. It would be impossible to detail these conferences with the Munitions Board, its successor the War Industries Board, the War Department, the Food Administration, the Fuel Administration, the Shipping Board, and representatives of foreign missions. One line of our activity has, however, been so important and given rise to so much public discussion that it will be well fully to review it.

The Executive Committee brought to the attention of the Munitions Board the fact that the business of the country was working in the dark in regard to Government demand on industry and material, with the result that it was obliged to proceed with over-caution and curtail its full usefulness to the Government and the country at large. A publication from time to time of the extent of Government demands, present and prospective, upon raw and manufactured material would permit business to proceed with confidence and demonstrate to what extent it could properly devote its energies, in part or in whole, to supplying private needs.

The importance of this view was thoroughly concurred in, but no Government agency was available which could devote its time and activity solely to the securing of this information and its proper distribution. Consequently the Chamber was called upon to provide an agency through the selection of a man, who would be appointed Assistant to the Director of the Council of National Defense. Mr. Waddill Catchings, of New York, President of the Sloss-Sheffield Company and the Platt Iron Works, was, on invitation, found ready and willing to make the necessary personal sacrifice to carry on this work, and was duly appointed Assistant to the Director while at the same time he was made chairman of a Committee on Cooperation with the Council of National Defense of this Chamber. Mr. Catchings proceeded to give the greater part of each week to his investigations and to publish the results to the business men of the country through a new series of bulletins, having a very wide distribution, known as War Bulletins. These have created a wide-spread interest among business men and the public at large through publication in the press and through the trade papers. They have served a very useful purpose in bringing business and industry closer to the Government and its activities.

In spite of the official cooperation given to this work, it was found exceedingly difficult to get at the actual facts in regard to Government demands and to predicate upon the information obtained any advice to business how to proceed in meeting the requirements of the public. This led the Committee to inquire carefully into the cause. It was found that purchasing authority was very widely distributed and did not head up in any one place. There was a lack of coordination between these authorities, acting in ignorance of the procedure of one another, which led departments to bid against each other, and, even further, bureaus in the same departments to compete with each other in the market and bid up the price. Obviously this situation made it impossible that there should

This review is submitted by:

R. G. Rhett, President, Peoples' National Bank, Charleston, S. C.
 Harry A. Wheeler, Vice President, Union Trust Company, Chicago.
 John H. Fahey, Publisher and Manufacturer, Boston.
 A. B. Farquhar, President, A. B. Farquhar & Co., Ltd., York, Pa.
 Charles Nagel, Former Secretary of Commerce and Labor, St. Louis.
 Willis H. Booth, Vice President, Hotpoint Electric Heating Co., Los Angeles.
 Joseph H. Defrees, Defrees, Buckingham & Eaton, Chicago.
 Robert H. Downman, President, Nat'l Lumber Mfrs. Ass'n. New Orleans.
 Samuel McRoberts, Vice President, National City Bank, New York.
 John Joy Edson, Banker, Washington, D. C.
 S. B. Anderson, President, Anderson-Tully Co., Memphis.
 Harry A. Black, President, Black Hardware Company, Galveston, Texas.
 L. C. Boyd, Vice President, Indianapolis Gas Co., Indianapolis, Ind.
 William Butterworth, President, Deere & Company, Moline, Ill.
 J. E. Chilberg, President, Scandinavian American Bank, Seattle.
 W. L. Clause, Chairman of the Board, Pittsburgh Plate Glass Co., Pittsburgh.
 James Couzens, Capitalist, Detroit.
 R. T. Cunningham, Secretary-Treasurer, Monongah Glass Co., Fairmont, W. Va.
 A. I. Esberg, Vice President, General Cigar Co., New York.
 Homer L. Ferguson, President, Newport News Shipbuilding & Dry Dock Co.
 Edward A. Filene, President, William Filene's Sons Co., Boston.
 L. S. Gillette, President, Plymouth Investment Company, Minneapolis.
 G. A. Hollister, Vice President, Rochester Ry. & Light Co., Rochester, N. Y.
 Clarence H. Howard, President, Commonwealth Steel Co., St. Louis.
 Frank H. Johnston, President, City Coal & Wood Co., New Britain, Conn.
 James R. MacColl, Treasurer, Lorraine Manufacturing Co., Pawtucket, R. I.
 Charles A. McCormick, Treasurer, Johnson & Johnson, New Brunswick, N. J.
 R. A. McCormick, Vice President, McCormick & Co., Baltimore.
 E. T. Meredith, Publisher, "Successful Farming," Des Moines.
 Lewis E. Pierson, Chairman of Board, Irving National Bank, New York.
 John L. Powell, President, Johnston & Larimer Dry Goods Co., Wichita, Kans.
 F. A. Seiberling, President, Goodyear Tire & Rubber Co., Akron, Ohio.
 Leon C. Simon, Vice President, Kohn, Weil & Co., New Orleans.
 Thomas B. Stearns, President, Stearns Rogers Mfg. Co., Denver.

As active business men, and as directors of the National Chamber, they are peculiarly fitted to chronicle this report of business and the first year of the war.—The Editor.

to note an increasing recognition of their usefulness by Government agencies with an enhanced sense of responsibility on the part of the committees themselves.

The determination of the Chamber to devote all its resources to war activities led the Board, on May 1, 1917, to constitute the Executive Committee as the War Committee of the Chamber, vested with all the powers of the Board, and called upon to meet in Washington as frequently as keeping in touch with the activities of the Government and the opportunities for the Chamber to be of service should require. Since that date the Executive Committee has met with great frequency, and conferred with Government officials at all times with a view to enlisting the Chamber in every activity of a business nature. In the main this cooperation has been welcomed, in many instances solicited, and we feel assured that a great service has been rendered in bringing Government agencies in closer touch with actual business conditions and oppor-

be any one place where one could ascertain the amount of the Government demand, or find out the plans of the Government for future demand upon any one line of material.

The situation thus discovered by the Committee had also impressed itself upon Government authorities, to the extent that a new organization was created, known as the War Industries Board, with coordinating functions between departments and better facilities for collecting and clearing information. The Committee, in advising the business men of this new agency affecting their operations, felt it necessary to point out its essential weakness as a centralizing authority in that it was but an agency of the Council of National Defense, which, in its turn, was created to exercise only advisory functions,—and a stream could not rise higher than its source. Purely advisory in capacity, it was expected to deal with and coordinate the activities of purchasing bureaus of several departments and boards controlled by officials in whom was vested not only statutory authority to act but absolute responsibility, which could not be transferred to a non-statutory and advisory body, for failure to act.

The investigations of the Committee of the work of the War Industries Board, which was created in July, led it to feel more and more that this new agency was failing to perform its purpose through its inherent weaknesses, above pointed out, and to stress the necessity for some new form of central control of purchasing power, which should be in effect an actual control.

Proceeding further with its work, the Committee and the Board of Directors to which it reported, came more and more to regard this central control as the keystone of the arch, without which the structure would fall.

This view was presented at the War Convention of American Business in Atlantic City in September, which went on record, through resolutions unanimously adopted, in favor of the creation by the Government of a board or department which should exercise central control over purchasing. This not only authorized but placed upon the Board of Directors the duty of doing what lay in its power to bring about the creation of such a central authority, and in its further activities along this line it has been acting upon this authority and with a view to carrying out the duty imposed upon it.

Offering Plans and Suggestions

SHORTLY after the close of the meeting a conference upon this subject took place between the Chamber's Committee and the Secretary of War, in which the views of the Chamber in regard to the weakness of the existing form of organization were set forth.

A carefully prepared presentment of the argument of the Chamber in favor of central control, based on actual study of the operations of the War Industries Board as then organized, was considered at length by the Board of Directors and by it transmitted to the President of the United States.

Hon. Daniel Willard, a member of the Advisory Commission of the Council of National Defense, succeeded Mr. Scott, who was obliged by illness to withdraw, as Chairman of the War Industries Board. In conferences with him he expressed his confidence in the ability of the Board, under plans which he had in contemplation, to work out the necessary degree of central control without new form of organization or additional legislation. He earnestly requested the Chamber to refrain from public criticism of existing organization until such time as would be required to give him purpose and plans an opportunity to

demonstrate their value. With the highest confidence in Mr. Willard's ability, although with grave misgivings whether the War Industries Board and its Chairman were vested with sufficient powers to coordinate the purchasing of the Government, the Board of Directors felt it but fair and right to comply with his request and for the period which it covered to submit its plans and suggestions to Mr. Willard for his consideration, without further appeal to other authorities, or presenting their views to Congress and to the public.

Efforts Toward Central Control of Purchases

WITH the lapse of this time the Senate Committee on Military Affairs had begun its investigation into the War Department. The Secretary of War, the chiefs of the purchasing bureaus in the War Department, and the Chairman of the War Industries Board had been called upon to testify, and public interest in the subject of organization had been roused to a high pitch. Mr. Willard resigned as Chairman of the War Industries Board on account of ill health, and his position, with the lapse of months, has only recently been filled through the appointment of Mr. Bernard M. Baruch. A complete plan of reorganization of the work of the War Department, which was confined to that department and did not extend to the coordinating purchasing agency with other departments, was undertaken. In these circumstances the Board felt itself called upon to take such action as lay in its power. It prepared a careful memorandum upon the importance of central control. On request this plan was submitted to the Senate Committee on Military Affairs by the Chairman of the Chamber's War Committee.

The Chamberlain bills, introduced as the result of the investigations of the Senate Committee on Military Affairs, were along lines intended to accomplish the purposes set forth in the Chamber's memorandum, but went beyond them in encroaching on the prerogatives of the President and providing for a war cabinet not entirely of his own selection, but requiring the confirmation of the members by the Senate. The bills were not acceptable to the administration, which shortly afterwards presented its own views in what has come to be known as the Overman bill, granting to the President, for the war period only, powers of reconstruction and transfer of functions which would permit him to establish such form of war organization and central control as he should deem best, as well as to meet the emergencies and consequent necessity for changing organization and functions as they should arise without further reference to Congress.

Through the passage of this legislation, which was in harmony with the resolution adopted by organized business at Atlantic City, the President would be empowered to carry out in the most effective manner possible those purposes which the Chamber had been advocating. To date the Overman bill has not been adopted, and consequently such reorganization looking to central control and the coordination of purchasing authority has been limited to that which could take place under existing statutes and by executive order. Chairman Baruch, of the War Industries Board, concentrates in himself, through the direction of the President, greater authority than that possessed by any of his predecessors and is proceeding under this authority with plans of new organization which should secure a greater degree of central control than has been possible in the past.

Organized business, as represented by the Chamber, has also given attention to the organization of war service committees representing the industries, and to report to the Board on various other subjects, including the operation of the Fuel Administration and of various bureaus and offices of the War Department, the Navy Department and the Council of National Defense.

Early in the period of the war a War Shipping Committee was organized to cooperate with the United States Shipping Board and bring the aid of the communities in shipbuilding centers to the shipbuilders themselves. It was early recognized by the Chamber that ships must become a most vital factor in winning the war and that if the public could be brought to a full realization of this fact much could be done to expedite and facilitate the building of ships. To bring this about the committee of the National Chamber secured the appointment of war shipping committees in every shipbuilding district throughout the country, and established an office with a competent staff to keep in touch with all these committees and to send out to them from time to time suggestions for new lines of helpful activity.

Other subjects that have been dealt with by the Chamber have been war finance, food, fuel, industrial relations, railroads, price fixing, economic policy toward Germany after the war, development of water powers, Russian affairs, daylight saving, foreign exchange and trade acceptances. These activities are referred to in other parts of the magazine.

No Cessation of Production

THE Committee on Industrial Relations, made up of Henry P. Kendall, chairman, Boston; Henry Bruere, New York; Waddill Catchings, New York; Homer L. Ferguson, Newport News; A. Lincoln Filene, Boston; E. M. Hopkins, Hanover, N. H.; Charles P. Neill, Washington; L. A. Osborne, New York; F. A. Seiberling, Akron, Ohio; A. W. Thompson, Baltimore, was organized to study the relationships of employment in normal times and as they will exist after the war. It was called on by the chairman of the War Industries Board to suggest the principles which should be incorporated in the Government's war labor policy.

The committee took the position that the basis of action ought to be representative agreements so that there would be no cessation of production. Such agreements, it held, should be supported and enforced by the Government through such machinery for the purpose as might be needful.

Subsequently, in February, the committee formulated on the same basis a war labor policy which emphasized, among other things, the importance of the part local commercial organizations might play in helping industrial adjustments.

The committee followed this with two other reports. One dealt with the work communities can do to take care of their own war industrial problems; the other described the Government's provisions for the emergency training of men to take charge of industrial conditions in individual plants where skilled executive attention was needed to lessen an abnormally large turn-over, and similar evils.

In the future the committee will be assisted in its work by a bureau on industrial problems, which with a committee of five is to act in an advisory capacity by keeping the committee informed of the Government's needs and policies with regard to industrial matters.

The Immigration Committee of the Chamber deals in its report with matters closely re-

lated to certain aspects of the problem of industrial relationships. It has been trying to answer the question, "What are the possible ways by which we can make real American citizens of the 13,000,000 foreign-born persons in the United States?" They speak 43 dialects. Fifty per cent of them are males of voting age; and of those only four out of every thousand attend school to learn our language. One-third of our foreign-born population, or nearly five millions, were born in Germany or in countries allied with Germany.

Americanizing Our Foreign-Born

THE committee points out first that we are at war; second that these people are on our soil and are voting at the polls; and that our basic industries depend to a considerable degree for their labor supply on this foreign-born element, most of whom have never been proved by any of the acid tests of loyalty.

Also that these foreign-born groups are organized in societies throughout the country to promote the racial or political autonomy of their native lands, and that their first interests, therefore, are not always in America. The problem is clearly to absorb them and Americanize them.

To meet these conditions the Immigration Committee has laid before the Chamber of Commerce and the industries through the country, plans and suggestions for systematically Americanizing our foreign-born population. In 1916 thirty-one chambers took up the work. In 1917 there were 150. A special pamphlet telling of this campaign in detail is now in preparation and will shortly be printed. Names of the mem-

bers of the Immigration committee follow:

Frank Trumbull, chairman, George A. Cullen, William Fellowes Morgan, J. F. Denechaud, Gano Dunn, Richard H. Edmonds, Marion E. Hay, Alexander Hilton, W. F. Hypes, Herbert Myrick, Raymond B. Price, Julius Rosenwald, Bernard J. Rothwell, Bolton Smith, Felix M. Warburg, A. C. Weiss, Walter F. Willcox, B. L. Winchell.

Of special and timely interest to business men is the report of the Committee on Trade Acceptances, made up of Lewis E. Pierson, chairman; E. B. Heyes, and J. T. Holdsworth. The general conclusions reached by that committee are more fully set forth by Mr. Pierson elsewhere in this issue.

A referendum is now being prepared by the committee, and will soon be submitted for the vote of the Chamber.

The Committee on Statistics and Standards has been making a strong effort in its study of crop and business conditions to arrive at the truth as far as possible, and to present it as a corrective to erroneous opinions that have been prevalent—especially with regard to food conditions. The committee in its reports has consistently pointed out that there never was at any time the likelihood of food shortage or food famine so far as the people in this country were concerned, but that our duty in conserving food for the benefit of our Allies is obvious.

The distribution of food products, in the opinion of the committee, is the crux of the food problem.

Among its most important recent contributions are a report on dry farming, one on the economic significance of the state university, and one on the economic value of negro education. This last has drawn approval from educators everywhere. Names of committee follow:

A. W. Douglas, chairman, St. Louis; Spurgeon Bell, Austin, Texas; A. Ross Hill, Columbia, Missouri; M. C. Rorty, New York City; N. I. Stone, New York City; L. D. H. Weld, Chicago; M. S. Wildman, Stanford University, California.

The Committee on War Payrolls is at work on the problem of taking care of dependent families of employees who enlist for military or naval service. It is also interested in the work of the Federal Board for Vocational Education, which deals with the question of rehabilitating crippled men returning from service.

Our Soldiers' Dependent Families

THE committee was requested by the Secretary of War and the chairman of the Council of National Defense, to undertake an investigation of the question of dependent families of men enlisting in the Army and Navy.

The committee did so and made specific recommendations practically all of which were afterward embodied in the War Risk Insurance Act.

The committee was requested last December by the Federal Board for Vocational Education and by the Surgeon General's department to cooperate in an effort to solve the problem of effective treatment for disabled service men. It made a close study of the matter and of the way

(Continued on page 52)



© UNDERWOOD & UNDERWOOD

They have just reached Ellis Island. They come from Poland, raw material for citizenship, a splendid addition to the forces of productive labor. They have ventured to the New World because they have initiative and worth beyond the average. And look at the baby. Isn't she a beauty? And won't she just pull the old folk right along with her?

Giving the Motor Truck More Gas

Expanding Use of Automobiles as Carriers of Freight Lays Demands Upon Petroleum Industry Which It "Can and Will Meet Because It Must"

By A. C. BEDFORD

Chairman of the Board, Standard Oil Company

CAN the petroleum industry keep pace with the development of auto truck transportation? I answer: "It can, and it will, because it must."

It was inevitable that motor trucks should become an increasingly important factor in our transportation systems. An instance of this was the successful operation in such a winter as last of a motor truck express route between New York and Philadelphia. Since then the service has been extended to Baltimore, Washington, Boston and other points.

The possibilities opened up by these and like transportation ventures emphasize that we must avail ourselves to the fullest extent of the service of the motor truck, and I am hopeful that there will be sufficient gasoline to provide for all the commercial as well as passenger vehicles in operation during 1918. Even should there be a shortage of gasoline, the development of the auto truck should not be retarded, even though it should become necessary to restrict the use of gasoline by passenger vehicles for pleasure uses.

When in July of last year I issued a statement on behalf of the Council of National Defense, I said "People should look upon their automobiles as necessities to be used only when needed. Not a gallon of gasoline should be used in the present emergency except for some useful end."

The warning is more than ever necessary now. The conservation of gasoline may no longer be a matter of choice. It may become necessary to set down definite and drastic regulations to restrict needless consumption.

What the Inventory Shows

HERE are the salient facts. At the beginning of 1916 there were about 2,400,000 cars and trucks in the United States. At the beginning of 1917, that number increased to over 3,500,000. The total automobile and truck registration in the country as of January 1, 1918, according to official figures furnished from all of the 48 states, is 4,941,276. This figure does not include duplicate registrations and, of course, does not include hundreds (perhaps thousands) of cars in remote districts, all of which are not registered. In round figures, there must have been close to 5,000,000 automobiles and trucks in the country on January first this year.

Before considering what this means to the petroleum industry, we may analyze the truck and pleasure car situation a little further. For our purposes, the rough estimate prevailing in the motor truck industry may be accepted as sufficiently accurate, and these figures place the number of trucks in operation in this country at the beginning of this year at 351,000.

A comparison of this figure with the total of 5,000,000 cars at once suggests the wide possibilities for the development of motor

trucks, and the industry would appear to be in excellent shape to take care of such a development. There are 378 commercial vehicle plants in this country, as against 195 automobile factories. But we can look forward to a development of the motor truck industry, and current estimates of motor truck output today run as high as 22,000 per month.

It is when we turn to the part that petroleum must play that the figures assume grave significance. Roughly, 5,000,000 motor vehicles in the United States will require about 50,000,000 barrels of gasoline this year. Gasoline exports to the Allies last year totaled nearly 8,000,000 barrels. They will be more this year. So that the total demand made on the petroleum industry for gasoline this year will be over 60,000,000 barrels. In 1917 our production was from 50,000,000 to 55,000,000 barrels.

In view of the increased demand, what are the conditions in regard to the production of crude oil? Here, again, the general facts, on the face of them, are not encouraging.

In 1917, our consumption was in excess of our production and our importations of crude oil from Mexico, and it is fair to assume an increased consumption in 1918. Our production does not at present measure up very well to these anticipated demands, and furthermore, it is probable that, owing to lack of shipping facilities, our importations from Mexico this year will decrease.

On the other hand, there are factors which tend to make the situation more encouraging. Apart from the possibility of relief in shipping conditions, and therefore of more oil from Mexico, we can hope for improved conditions in our own production. Most of last year and early this year, drilling operations were largely curtailed by the virtual impossibility of getting drilling tools and casing materials.

Even prospecting was restrained somewhat by the uncertainties surrounding the future of the oil industry.

Many of these uncertainties have now been cleared away, thanks to the frank and liberal spirit in which Mr. M. L. Requa, representing the Oil Division of the Fuel Administration, has dealt with the industry. Realizing the situation, all oil operators are keen to develop production with all possible dispatch.

Auto Owners Take Note

THERE is, above all, the broad general fact that there are millions of acres of prospective oil territory, and the possibilities of future development in still practically virgin territory are encouraging. For the immediate present, another encouraging feature is the improved processes of manufacture, by which larger quantities of gasoline can be produced from the crude, which heretofore was sold as fuel or gas oil.

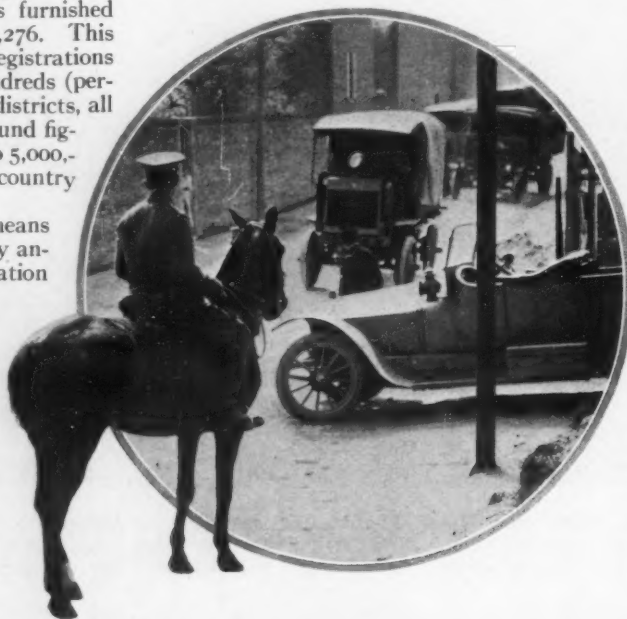
The development of motor transportation comes in as one aspect of a many-sided problem in which the fuel oil requirements for our own and the Allies' naval and merchant marine furnish another complication.

I mention fuel oil because it may have an important bearing on gasoline supplies, in that much gasoline is obtained from what would otherwise be fuel oil. If, however, fuel oil itself is in urgent demand, it naturally ceases to be available as a source of gasoline supply, and it is even possible that the fuel oil demand might be so urgent that crude, which is at present run for gasoline, might have to be run for fuel oil, thus still further limiting the source of gasoline supply.

In the main, however, although I have told frankly and in detail of the difficulties with which the petroleum industry is faced, I still remain firm in my belief that these difficulties will be overcome and that all the really important gasoline requirements of the country at large will be provided for amply.

But let me again repeat, because I feel very deeply the seriousness of it—every consumer of gasoline must endeavor to purge himself of his share of reproach because of any unnecessary use or waste of gasoline, remembering there is still great demand for our own and our allies' war needs.

RESOLUTIONS are one of the staples of democracy, and play a real part in the meeting of every organization, as any member of a resolutions committee can bear witness. When the chambers of commerce of South Africa had a congress near the end of 1917 the seventy-odd delegates had to face 116 resolutions, and wrestled with them for three solid days. The congress went on record as declaring the South African government should more freely consult chambers of commerce before taking action radically affecting commercial and industrial situations. Clearly, South Africa is up and doing.



The Question of the Terminals

Solve It and You Solve at the Same Time Most of the Other Transportation Problems Which Perplex Us

By JOHN F. WALLACE

Chairman Chicago Railway Terminal Commission

THE terminal problem is really the big problem of our railroad transportation system. Its solution will automatically solve most of our transportation complexities.

The real importance of the railway terminal may be appreciated from the fact that, while the total mileage of main line railroad tracks in the United States is something over 240,000 miles, the mileage of terminal tracks is almost 90,000, or more than one-third of the total railway mileage of the country.

The importance of the terminal appears even greater when it is considered from the investment standpoint. The investment in terminals more than equals the total investment in all railroad property outside the terminals. The investment in a recently constructed passenger terminal represented an amount sufficient to build a double-track railroad—exclusive of secondary terminals—of a length equal to that of all the railroads entering that terminal.

Viewed from the standpoint of delays, the railway terminal becomes even a larger factor in the transportation problem. The average freight car travels about 25 miles a day. The average speed of a freight train between terminals is 10 or 15 miles an hour. The average freight car thus spends 12 hours in the terminal for every hour it spends between terminals.

Heretofore discussions as to the solution of the terminal problems of our country have been more or less academic. All of these discussions clearly pointed to the necessity of co-operative operation of railroad terminals and, in fact, of the railroad transportation system

as a whole, but the railroads were without the legal authority to make this change.

However, with the taking over of the railroads by the Government, it would seem that if a proper treatment of the railroad terminal problem were worked out at this time the means would be at hand to put this solution into practical operation.

Since the remedy—whatever it may be—will eventually be applied by Congress, it is highly important that the general public comprehend the fundamentals of the present transportation situation and the general nature of the changes in operation and control necessary to bring about a more efficiently operated transportation system.

These changes will necessarily be of two kinds: Physical changes in terminal facilities and changes in method of operation.

Terminal facilities are for the purpose of handling either freight or passenger traffic. Passenger traffic is divided into through and suburban traffic. Freight traffic is divided into carload freight and less-than-carload freight.

It is highly desirable that all of the passenger facilities be concentrated at one central point, but in some localities topographic and geographic conditions do not permit this. In other localities limitations of size will not permit all of the passenger traffic to be concentrated in one station. This is true of a city like Chicago, where a station sufficient to accommodate all of the passenger trains entering the city would be too large for the convenience of the traveling public, or for economical operation.

The routes of entrance to the passenger

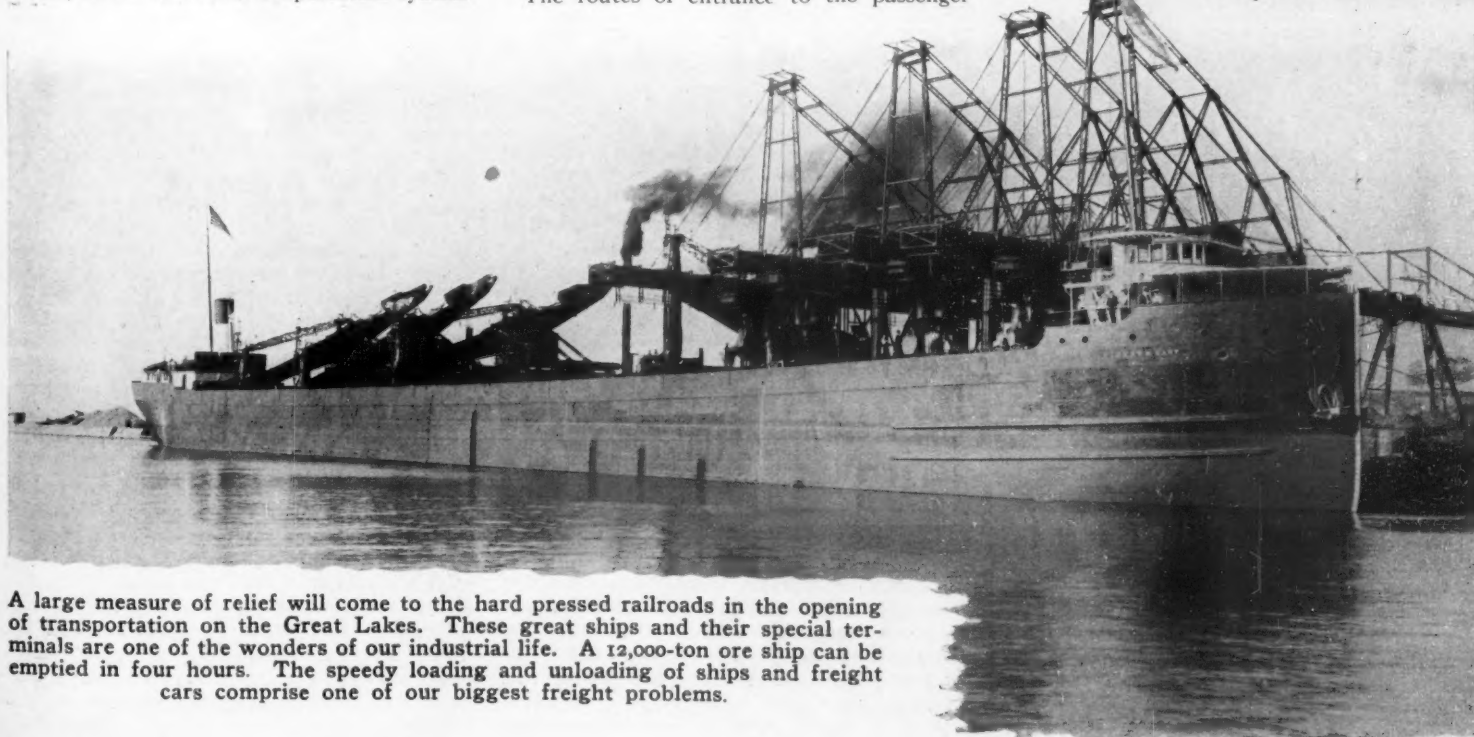
station should be as direct as possible, and, where more than one station is necessary, the entering lines should be so grouped as to eliminate any crossing of lines. These entrance routes should be concentrated as much as possible, so that a maximum of usage may be obtained on investment and also because—within limits—the greater the traffic density the more economical the operation.

The Terminal Problem

AMPLE station space should be provided. The arrangement of entrances, baggage checking facilities, ticket offices, and so on, should be such that the passenger may travel in a direct line from his entrance into the station to the point where he takes his train. Exits from track platforms should be direct to the concourse, so that there may be no difficulty in meeting incoming passengers. The arrangement of driveways for vehicular traffic—both incoming and outgoing—should also receive careful attention.

The proper handling of suburban traffic is a large problem at all of our urban railroad centers. Our American railroads have not handled this traffic as effectively as have some of the European railroads, and while conditions are not analogous, the American railroader could learn much from a study of European methods.

The practice in this country has been to handle the suburban train much the same as the through long-distance train is handled, although the character of traffic is entirely different. Suburban traffic partakes greatly of the nature of local or urban transportation. It does



A large measure of relief will come to the hard pressed railroads in the opening of transportation on the Great Lakes. These great ships and their special terminals are one of the wonders of our industrial life. A 12,000-ton ore ship can be emptied in four hours. The speedy loading and unloading of ships and freight cars comprise one of our biggest freight problems.

not require the same facilities as through traffic.

When at all practicable, suburban traffic should be entirely segregated from through traffic. It requires only unloading platforms much the same as subways or elevated trains and facilities for the rapid and continuous operation of trains. A good example of segregated suburban traffic is the Illinois Central in Chicago, where the suburban trains use neither the tracks nor the stations of the through passenger trains.

The Neglected Freight Terminal

IN all modern city planning, consideration is given to the proper treatment of railroad properties. But more attention has been paid to the passenger than to the freight terminal, due to the fact that the passenger station has always been more or less monumental. It lends itself readily to harmonious architectural treatment in connection with other civic and governmental structures. Freight facilities have usually been accommodated in one-story, simple structures, intermixed with surface tracks.

Another reason has been—if this phrase be allowable—that the passenger station has been in the front yard and the freight station in the back yard. Yet, as a matter of fact, in many localities superficial freight development has been the great barrier to the healthy and logical growth of municipalities.

Carload freight is divided into that which originates in or is destined to points in the terminal zone and that which is transferred from one railroad to another for hauling to points more or less distant from the terminal zone.

This interchange freight should receive first consideration. It frequently happens that a car of commodities consigned from a point in the west to a point in the east is handled successively by several railroads, and at every

place where it passes from one railroad to another it goes through a terminal, often passing through the hands of an intermediate company, occupying space in several railroad yards, congesting interchange tracks and encountering days of delay.

The remedy for this condition is more direct routing—and a routing that will pass the car around rather than through the larger railroad terminals. Under present practice a car may be carried miles out of its direct course to destination in order to give a greater mileage to a preferential railroad. Frequently the shipper is equally guilty with the railroad for this condition. The interest of economy demands that the car should pass in as direct a line as possible and with a minimum of delay from the point of origin to destination, over the most economical route.

The car originating in or destined to a point within the terminal zone is another problem, the solution of which is unified operation of railroad terminals. At present each railroad has its own system of tracks and terminals within the terminal zone and seeks to operate traffic to its individual advantage without regard to the ultimate economy of complete terminal operation.

To introduce unified operation it should be possible—even during the temporary period of Government control—to provide that each railroad terminal zone should be operated as a unit by one local manager.

Railroads entering the terminal zone should turn over their traffic to the local manager at points designated by him, and he should proceed to handle this traffic to its destination within the terminal zone along the most direct and economical routes and with a minimum of switching and delays. Originating traffic should be handled in the same way. If such a plan were put in operation—using only existing facilities—the beneficial results would be immediately apparent; and future investment in terminal improvements should be

along lines that would promote and not hinder this unified operation of terminals.

Fundamentally, the application of the cooperative principle is the only solution of the present unsatisfactory condition, yet this is most difficult because it involves a complete change in the present method of handling this class of business and requires the construction of facilities along radically different lines from those now obtaining.

In the handling of less-than-carload freight, three interests are involved: the shipper, the railroad and the municipality.

The shipper is interested in expedition of shipments, convenience of trucking and cost of service; the railroad is interested in the investment required to furnish the necessary facilities and economy of operation; the municipality is interested because facilities for handling less-than-carload freight are usually located contiguous to congested business centers and if not properly developed may restrict the logical growth of the city and cause congestion of street traffic.

Any solution that is put forward for handling this class of traffic must provide a well-balanced scheme in which due consideration has been given to all of these interests.

This solution will require an arrangement of facilities that will permit a free flow of street traffic, economical railroad operation, expeditious handling of freight, and utilization of expensive real estate to the fullest possible extent.

With the possible exception of the freight facilities being constructed in Chicago at the present time by groups of railroads entering the Union Station, there has been no advance in the past 40 years in the handling of less-than-carload freight. These railroads occupy a restricted area which could not be expanded. Hence they were compelled to build more than one level, thereby marking the first real advance in this country in the method of handling less-than-carload freight.

The conditions which (Concluded on page 80)

RAILS

Transportation's Gordian Knot Will Be Cut Only When Business Men Take Their Stand without Prejudice for That Solution Which Is Best for the National Welfare

By HARRY A. WHEELER

Chairman Committee on Railroads of the Chamber of Commerce of the United States

REPRESENTATIVE American business men declared it to be their best judgment that Congress should enact a general railroad incorporation law, to the end that every railroad carrier would work under a federal charter. They declared it to be their belief that that law should be a mandatory law; that all railroad corporations should be required to operate thereunder.

They declared, by an overwhelming majority, that insofar as rates are concerned, intrastate as well as interstate rates should come, by act of Congress, under central control, in order that there might be less of conflict than has existed in the past. As to railroad securities, they recommended that there should be federal jurisdiction over their issue, that thus railroad credit might be established upon a firmer basis and railroad securities might regain the popularity they enjoyed years ago.

The business men to whom I refer are the half million members of the organizations composing the Chamber of Commerce of the United States. Their position with regard to railroad reform, outlined above, was expressed in their votes on referendum No. 21, the last

formal declaration of the National Chamber on railroad operation.

Today, instead of federal incorporation, we have federal control of all of the operations of the roads. That has come as the result of the war, which made it necessary for the President to exercise, through the Secretary of War, the power which the law delegated to him in times of emergency. So far as the rate-making power is concerned, Congress has delegated definite authority to the President to act on that question, should it become necessary to do so, and, as to the securities which may be issued by the railroads, the government will itself during the period of the war furnish funds, in part at least, for improvements and replacements, for extensions, and to assure conditions that will make for better transportation. So the three things which the members of the Chamber asked should become the subjects of legislation have, for the time being, passed into the future; for the present, we have them all in operation under this emergency condition.

Without attempting to determine what questions may be passed upon in future

referenda, it is well to remember that there are conditions to which we should not be blind, there are questions having to do with railroad operation during the war and in the period of readjustment that will follow that business men and business organizations must study and ponder and debate in order that we may be ready, when the time comes, to lay before those in authority the essence of our judgment, gathered by deliberate processes, with respect to the return of these properties to private ownership.

What of the Future?

TAKING the roads out of private ownership and putting them under federal control has given rise to an increased propaganda and to an increased number of propagandists, part of whom are seizing upon this opportunity to further intrench the theory of government ownership of railroads, and part of whom are accepting this emergency to make more prominent their declarations that such a condition is inimical to the welfare of our country.

The first class are loud and persistent, and



Nature laid this fluid track, ready for our use. All we need to do is to dig some of its shallow spots a bit deeper and put on some light-draft barges, and lo we have saved the overburdened railroads a broken back. A broken back would not do just now. It's one thing we can't fight with

academic in their demands, and will be more so as the months and possibly the years succeed each other, before the question actually comes to a test. The other class is not academic in its presentation, but holds to definite views which it has long held as basic to the welfare of our transportation system and to the welfare of the nation itself. Between these two will be the solution of the railroad problem in the United States in the years that follow the war. The question of whether continued government control or ownership is a necessity as a matter of national welfare is a question which the Chamber of Commerce of the United States must face and study and declare upon without prejudice, and with the courage of conviction, when that conviction is reached. And this even though it may be to overturn the views we long have held and which we may now hold, for courage is bound to be the quality which characterizes the utterances of that organization.

If by that careful analysis we shall find that the underlying principles of our American life demand that private ownership shall be retained in order that initiative and energy and ambition may be put behind the development of this great business—if we find that unified control and operation can as well be had under private ownership as under government ownership—if we find that by public mandate or consent our commissions regulating these great utilities can be turned from repressing and restraining instrumentalities to the performance of their functions with vision, aggressiveness and constructive thought—if we find that, insofar as these operations are

concerned, it is for the best interests of this country to preserve that thing which we have always called fundamental to Americanism—and have private ownership, and merit for service, and competition to improve service continue, then the Chamber will stand as courageously for that as for the other, because that will be for the national welfare.

The Chamber of Commerce has at this time a double duty and a double responsibility. On the one side it is the nation's business to fight this war, and it is the nation's business to have but one ambition, but one vision. We are for reaching the goal at the earliest possible moment and in the most forceful fashion. Nothing must restrain, nothing retard. In this we are bound to assist by every ounce of power we possess.

Keeping a Solid Foundation

BUT on the other side it is essential that we shall have an eye to the peace production of the future, to keeping under our industries and our commercial instrumentalities a foundation that unquestionably will be such as to sustain the structure of commerce in the largest sense. We must look forward to the time when the war is over, and it is our duty to have the double vision, that which never allows us to flag in our enthusiasm from the present cause, nor to abate in our effort one iota to bring that cause to speedy victory. Nor shall we, because we have that vision, fail to look out into the future, and get ready for the time that is coming.

The only man who fears to look beyond the present conflict into the days that are coming

is the man who has no faith. The man who has faith in justice and righteousness and virtue is the man who must know where the cause ultimately will run, and where the victory ultimately will lie, and who realizes the greater necessity for preparation for the good days that are to come.

A victorious people will be a people showing humility; otherwise the world will not be safe. A braggart and bombastic people cannot win a war like this. The principles that are involved are too precious, the goal is too great. It may be, as we go farther into the conflict, that we shall have to be taught more of humility and less of self-conceit. But if we have to learn that lesson, if we have to travel rough paths, if crowns even of thorns must be pressed upon this nation's head, that is no reason why we need doubt for one single instant the result that will ultimately come.

The god of the Hun is not my God nor the God of our fathers. God linked with the brutality and the beastiality that has characterized our enemy in this war, is blasphemy to the God we know. The God of justice, the God of mercy, the God of virtue—attributes of godliness—where do you find them in the German programme?

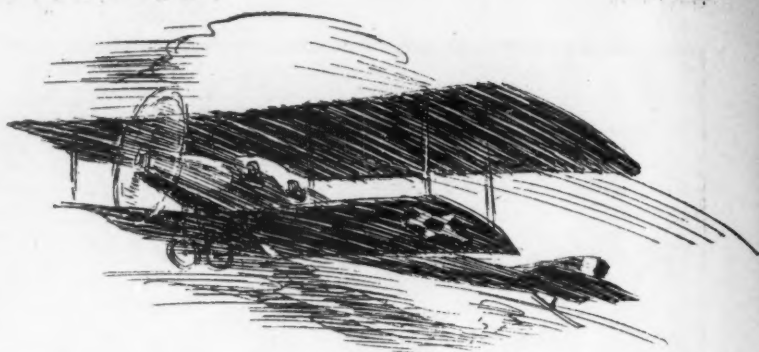
As we believe in the justice of God, as our fathers, in laying the foundation of this country, laid it in faith in that justice and in that God, so, through whatever paths we may have to travel, we are going towards the one ultimate goal that can have no other end than the utter dissolution of military autocracy, no other end than the utter wiping out of Prussianism from the face of the earth.

Economy Bonds, Inflation's Antidote

A Plan To Induce the Saving Which Is the Only Remedy Against Dangerous Credit Expansion in Financing the War

By O. M. W. SPRAGUE

Professor of Economics, Harvard University



A LITTLE less than a year ago the Government planned to expend something like \$19,000,000,000 during a period of 12 months. It is now evident that not much more than \$12,000,000,000 of that will in fact be expended. This is not because the Government could not have raised the \$19,000,000,000. It is because the plans have not been executed that were in mind at the time the appropriations were made.

I presume we all regret that the Government has not found it possible to develop its programme rapidly enough to have expended the \$19,000,000,000. The reasons, of course, are various. It would probably be beyond human power to organize the industries of the country in the manner necessary to complete the full programme in the time required.

But it is not my purpose to enter into that matter. I simply want to call attention to the way in which the manner of financing the war reacts upon the speed with which the Government can develop its programme. In raising the \$12,000,000,000, it has been absolutely essential to make use of the credit machinery of the country.

The extent to which credit is permanently expanded in connection with financing the war has not been touched upon. The initial subscriptions to the various loans must be met somehow or other; to whatever extent is necessary, by means of credit expansion. But if the people who have subscribed to the loans, or other people, while the proceeds of each successive loan are being expended, do not save enough to liquidate the borrowings which they have made at the banks in order to subscribe to the loans, then we have a condition of a more or less permanent addition to the volume of credit. It ceases to be merely a revolving credit of a more or less fixed amount, perhaps expanding a little and then contracting to something like an equivalent extent. There is a permanent upper swing.

Now, that means in the first place an advance in prices. The Government gets a large amount of purchasing power, which it uses, coming into the market for goods. The people have not contracted their demand for goods, their use of purchasing power, to an equivalent extent. Therefore prices go up. To some extent I agree that that is inevitable; but here it is primarily a question of degree.

In Germany they have facilitated free loans on every conceivable kind of security, in order to stimulate subscriptions to their bond sales, and the people have subscribed. But thereafter, while the Government has been expending the proceeds of the loans, the people have to a very large extent saved and liquidated those loans, so that credit there has in large part revolved. When you consider the enormous loans which the Germans have

made, together with the number of men in their armies, it is simply astonishing, the way in which they have kept down credit expansions. The only way that that can possibly be done is by saving.

What are the consequences of a failure to save? A pull on labor by the Government in one direction, and a pull for labor on the part of the people in the opposite direction. The Government gets its labor, but more slowly than it would if the people were economizing more generally, so that their pull is somewhat less powerful. That is one of the reasons why the Government's programme has not gotten as far forward as we might wish. In consequence of these two pulls, wages go sky-rocketing.

That is one of the consequences of the failure of the people of the United States to save to an extent even roughly corresponding to the \$12,000,000,000—to say nothing of the \$19,000,000,000 which we thought we might expend.

Consider some of the consequences of this failure to save. One of them is seen in the situation of the local utilities. All prices cannot expand equally. Consequently the local utilities are in a mess. They need assistance; their credit is damaged to an extent to which it would not have been damaged if prices had not gone up to the extent that they have in fact advanced. Consequently it becomes necessary for the Government to utilize the new machinery of the War Finance Corporation. That machinery is necessary, because if you are going to have the war largely financed by inflation and credit expansion, you must not have one-sided credit expansion. You must have it all around. Everything must go up. So we must have this War Finance Corporation, which will loosen up credit still more, and that is desirable.

Forecasting Government Expenditures

BUT the corollary is also equally true, that in consequence the importance of saving is still further accentuated. We should not delude ourselves into the notion that because we have the machinery now for expanding credit with reference to all undertakings, therefore we need not save. Rather, we must save more, because with the presence of this necessary machinery we are pretty certain to expand much more than we otherwise would.

The Government will have to come into the market with its War Finance Corporation securities, and that will take up a certain amount of slack,—if not of savings, further credit expansion will be required. Some surprise has been expressed because the Government's issue was only \$3,000,000,000 instead of \$5,000,000,000; but the other \$2,000,000,000

will have to be provided for the purposes of this War Finance Corporation.

The amount which the Government will spend during the next six months cannot be forecast. Presumably it will be at least \$15,000,000,000. I think it is fair to assume that it will be considerably more than during the past few months, for we are getting into our stride, and the Government will be employing more labor, buying more goods, and expending more money.

Saving Versus Credit Expansion

IF the people do not save a single copper, that entire \$15,000,000,000 will be advanced by the banks in the form of credits. If the banks are not prepared to advance it, it will be advanced by the Federal Reserve banks of the United States; and if they should not be able to do it, the Government will do it by the issuance of paper money. This war is not going to be allowed to stop on account of the failure of the people to save; but if the people do not save, prices will go sky-rocketing still further, with further disturbance of the local utilities, and a further drain upon all the people with fixed incomes.

It is sometimes supposed that by the use of credit in some way or other the burden of financing this war is shifted from the present to the future. That is an absolute and unqualified fallacy. The Government cannot use in this war anything but the current products of labor and capital, which are now in existence. And to the extent to which the Government employs that labor and capital, the amount of goods and services available for the use of all of us is necessarily reduced, except insofar as there may be some increase in productiveness.

The process of credit expansion, as contrasted with saving, has a very different effect in the burden which it imposes upon different classes of the community. Financing the war largely by credit expansion and raising prices places a heavy burden upon all people with fixed income. This means not merely the persons who live on salaries. It also means that large class of people who live on investments in bonds and preferred stocks. There was not such a class in the time of our Civil War, when we financed largely by inflation in the particular form of paper money. The burden then fell mainly upon the salaried class.

Now we have a huge class in this community comprised of the owners of bonds and preferred stocks, and they will suffer mightily on account of the rise in prices. Take a man, for example, with an income of \$1500 from bonds and stocks. The credit inflation method of financing this war, with its consequent rise in prices, will probably reduce the producing



power of his income by something like 30, 40, 50 or 60 per cent. That becomes his contribution to the war. He is forced to diminish his pull on the labor and the capital of the country because his income, owing to the rise in prices, does not buy very much.

That is all that the process of credit inflation accomplishes. It simply places the burden of bearing the sacrifices of the war—the economic sacrifices—mainly upon the people whose incomes are stationary. On the other hand, some incomes advance more rapidly; some wage earners get more, and some of us may get more under inflation conditions, and may possibly be better off.

In any event, then, we must finance this war by a deduction from the current income of all of the people, whether we finance it by inflation or do the trick more directly by saving universally.

The Bankers Trust Company of New York has recently prepared an analysis of the amount of savings which would be necessary, in the event that \$7,500,000,000 should be furnished the Government in the course of the next year, by those who pay income taxes, together with subscriptions to bonds. That is only half of the estimate of the total amount.

According to those calculations, it would be necessary, in order to raise \$7,500,000,000, that every person in the United States with an income in excess of \$150,000 should devote between 70 and 80 per cent of his income to the payment of income taxes and bond subscriptions. It would be necessary for all those with an income between \$50,000 and \$150,000 to save between 60 and 70 per cent. Dropping down a little, to those between \$9000 and \$30,000, they should save 40 per cent of their income, or use 40 per cent in the payment, partly, of existing taxes, and the balance for the purchase of Government bonds. From 15 to 20 per cent of their income should be used in those ways by those with incomes between \$2300 and \$5000, and from 10 to 15 per cent by people with incomes from \$900 to \$2500.

Direct saving to that extent would produce, according to this estimate, something like \$7,500,000,000. I think that will give you some idea of the extent to which the people must economize, in order to finance the huge sums which the Government is going to expend, and some idea of the extent to which they must economize indirectly, through the effect of rising prices under the credit inflation policy. I doubt

whether any considerable number of people, except the people of large wealth, are saving anything like the proportions which I have indicated. I frankly confess that I am nowhere reaching that proportion

which is assigned for my particular income; and I doubt whether very many are. I should like to have a confession from men who happen to be in receipt of incomes between \$9000 and \$30,000, whether they have during the last year, from their incomes, eliminating the shifting of investments, used 40 per cent in the purchase of bonds and in the payment of taxes. Not very many, have, I fancy.

The reason, I think, that many of us do not do this is because our neighbors do not; because we do not feel that our 20, 30 or 40 per cent, if we should make the necessary saving, would matter very much when the figures rise into the billions. Moreover, it is very much more difficult to save when our neighbors do not. Our neighbors largely set for us our standards of living. Consequently, I do not believe that any amount of preachments on the importance of economy, and any amount of argument, however convincing it may be, that we are bound to be forced to economize through rising prices if we do not save,—I say, I do not believe that that will prove particularly effective, and I do not expect that the people of the United States, under the present methods of financing the war, will begin to save the amount which is necessary to carry us along. There is the danger that we may save so little that the credit machinery will break down.

A Case In Point

WE can endure a considerable expansion of credit. We cannot endure an indefinite amount of it, as was indicated in Russia, where one of the causes, no doubt, of the revolution was that they practically financed all of their war by means of credit expansion, and it became so great in volume that the credit machinery broke down. I am therefore going to bring forward a proposition which seems to my mind likely to induce some portion of the general economy needed in order to raise from savings some considerable part of the \$15,000,000,000 which we need for the next year.

I can illustrate my proposition by taking the case, for example, of an income of \$10,000. Let us

suppose that in addition to existing taxes—the tax on that income being only \$675 it happens—in addition, I say, to the existing taxes, let us suppose that an additional tax of 10 per cent on the entire income were imposed; that is, a tax of \$1000. Now, suppose that a provision were inserted in the statute that a man could buy himself free from that additional tax by the purchase of, say \$3000 or \$4000 worth of what we will call economy bonds. Those would be a new class of bonds, maturing, let us say, one or two years after the close of the war. They would be registered in the name of the saver, and non-transferable.

They would not be eligible for rediscount at the Federal Reserve bank, and the

banks of the country would be urged as a patriotic duty, not to lend to people in order to permit them to buy these economy bonds. Further, it would be necessary in the income tax statement of each taxpayer to state that he had purchased these bonds from savings, and from no other source; that his holdings of properties and securities of whatever sort were the same as, or the equivalent of, those which he owned at the beginning of the previous year.

Now, some people are so fond of their comforts and luxuries, and so fearful that business may be disturbed, even though the Government wants one-third of the labor and capital of the country, that they would probably prefer to spend their \$9000 and pay the tax of \$1000. But I fancy that the great mass of taxpayers

would prefer to buy these bonds, and I fancy that there would not be any more evasion in this case than there is with reference to other burdens imposed upon us by the Government.

I believe such a concrete proposal would concentrate upon a specific purpose the whole campaign to set free labor and materials for purposes of the Government, and to avoid the burdens attending the expansion of prices under the policy of financing the war mainly by means of credits.



FAITH AND WORK

Faith Will Carry Us Out of the Valley of the Shadow, While Honest-to-Goodness, Sweaty Work, When Reconstruction Comes, Will Make Us Free

By FRANKLIN K. LANE

Secretary of the Interior

WOODROW WILSON is today not merely the president of the United States. He is the leader of the liberal thought of the world. I had never dreamed that the time would come in my lifetime when that could be said of any American. I was reared as a boy in the day when the word of Gladstone went far round the world. I was born in the day when Louis Napoleon mystified Europe, and hypnotized her diplomats. Later we came to see the rising power of Germany, and the great name of Bismarck swung before the world. America was a republic, removed, regarded by Europe as almost semi-barbarous; but in the beginning,—only just born. That the time would come that there should come from among us a man so large in mind, so great in spirit, so forceful in character, so broad in vision, that France, England, Italy, and far-off Russia too, would hear that voice and heed him, had not come to my belief.

Now, our prayer is that the God of Right may keep close to the ear of that man in Washington and speak to him words of infinite wisdom, that his mind may be kept clear, that his eye may be kept sharp, and that the God of Humanity may strengthen his good right arm.

If I were asked to say two words to America, I would say nothing more than these: "Have faith." Faith is the foundation of civilization. It divides the barbarian from the civilized man. It is the foundation of every business that you are in. It is the foundation of all government that is worthy of the name. Faith is the miracle worker of the ages.

The man who discovered this continent was led to it by faith. The men who reached the shores of this continent and piloted their way through the forests and across the lakes and opened up these unknown regions, those men were creatures of faith. The men who built the roads into the West, all the pioneers who have made our country one of the greatest, because we have conquered a continent and made it our own, those men were men of faith.

This Great Adventure

WE in this war also have faith, and our faith is that if we can down the enemy who stands before us now, this world all around will become advanced to that point where men can say equal opportunity presents itself to every man, and political and social and economic rights may be obtained under democratic institutions. There has been no adventure, there has been no war in any time, that reaches to the dignity of this. We are making a war for the preservation of the fundamental rights of man, an unselfish war, a war for ideals and for manhood, sacrificing ourselves, our boys, your boys and mine—for what? For an ideal; for something in which we believe; for a faith. A faith in what? A faith that self-governing man can bring about a civilization more noble than any the world has ever seen.

So I say, have faith, no matter what the news may be today. Have faith that the President of the United States, who has guided the fate of this nation for five years, who has guided us with patience, great and remarkable patience, until the day of strife came, will be able to steer the ship through the troublous seas that lie ahead; for he has conscience, he has character, he has ability, and he has vision.

Have faith in him.

Let there be no doubt in your minds, no matter what the dispatches may say. Let there be no doubt but that we will win. No one could have prophesied three years ago that there would be a line in Picardy today, if he had followed mere lines of reason. A nation that had been preparing for war for 40 years was up against two nations almost unprepared. All reason led necessarily to the conclusion that Paris would have been captured within 90 days—aye, within 30 days. All reason stands against the existence, even, of the thin line that stands today in Picardy. All of Northern France is dotted with battle fields, upon every one of which more men have died than at Gettysburg or Waterloo. All those villages have a sacred name, and will have for all time in history because of the fight which was made there for them.

Making Thick That Thin Line

BUT that is not the end. When there is talk of defeat, recall who are there now. Scotchmen stand there, who do not surrender. Irishmen stand there, the most gallant of fighting men; Irishmen, who are fighting for an Ireland after this war in which they can have home rule. Englishmen stand there, who for 22 years stood off Napoleon and finally defeated him. Australians and Canadians, New Zealanders and South Africans, stand there like heroes before the world, ready to die for their cause. Frenchmen stand there, defending their own soil and civilization. These have more to live for and more to die for than any men who have ever stood in battle array in the history of the world. That line is thin, but we are weaving into it day by day our boys in khaki and making it thick.

I do not disparage the courage of the Germans. I think it is marvelous. Think of what those men have done. Think of the manner in which they have carried on this advance. Up come those men in solid ranks. A semi-circle of rapid-firing guns mows down one rank when it has advanced a few hundred yards. A second rank comes on, and by the time it is cut down it has gained 100 yards. Then a third rank comes up, and it is mowed down, but behind it is a fourth rank, and so by added increments of death the Kaiser wins his way. But those men will hold that line and stand because they have never learned how to do anything else. And we will stand with them. The war does not end until the last act in the drama. In that last act you will see that boy in khaki who has gone from

your home forward at the front of the stage, playing a proud and noble part, saving Western Europe and this continent for a larger and a finer civilization.

I have faith in Foch. I have faith in Pershing. Those are the men on whom we should keep our eyes, and if we do, even in the darkest moment our hearts will be strong, and it is strong hearts that win a war. Strong arms may win a battle, but strong hearts win wars, because it is the morale of the fighter that counts in the end.

We must be staunch, and we must be fine in spirit to back those men up, and you business men have a responsibility cast upon you that is cast upon no other class, because upon you rests the burden of maintaining the morale of the business world throughout this war, and war now is business, and our business is war.

A Dollar and a Dream

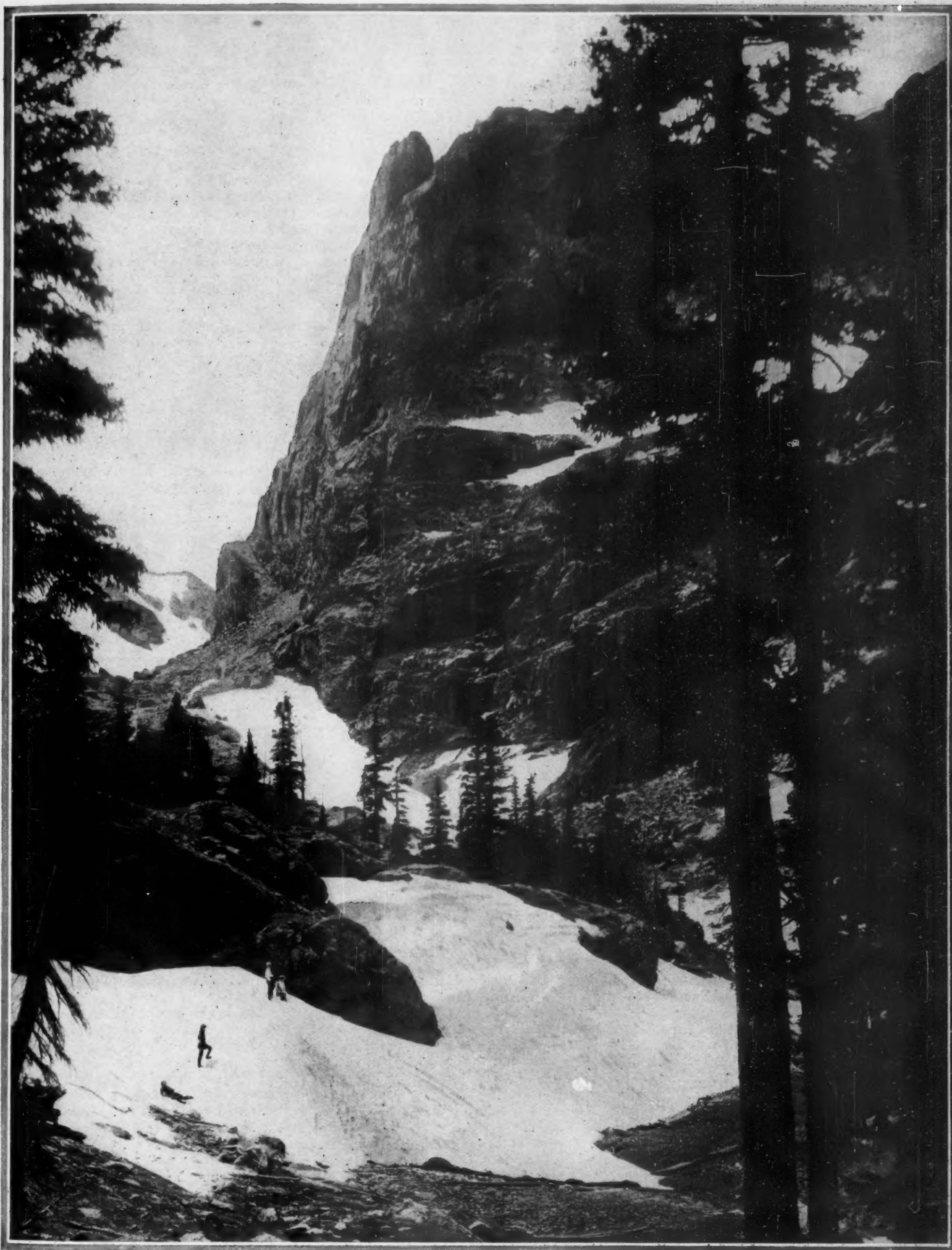
THERE are two kinds of men—only two kinds of men in this world at this time, the small men and the big men. The small men are those who cannot see because they have a dollar right in front of their eyes, and the large men are those who can see because they have a dream in their hearts.

I do not like to say it, because I think war an awful curse,—but good things are to come out of this war, and one of them is to be the purifying of business. It is to be a noble thing, because for the first time, business men have had a real opportunity to prove that business could be purified through patriotism.

I would like to ask business men if it is not true that if I should say to them, "Pledge me your word that you will not make one single dollar of profit throughout this war," there would be a unanimous vote in favor of the adoption of that sentiment, if I said it was necessary or if President Wilson said it was necessary to our success.

Our motto and our slogan must be, from this time on, put every dollar to use, put every hand to use, put every acre to use, put every idea to use;—because we have come to the time in the history of the world when we understand that such a thing as property exists only because of use. That which you have belongs to me, in the larger sense. That which you have gained out of the community should be so used as to be of service to the community. This nation is the trustee of great ideas for the world. Business men are trustees of their property for the world. Let them regard themselves as trustees, and they will not go astray in handling their property.

I want to refer to another thing for a moment. We must think of the day when the men come back, and we must think of the making of America. We must think of a new America, and we must begin with the boys who come back from the front. I say that every one of those men should have an opportunity to acquire a piece of soil of the United States.



COURTESY OF THE DEPARTMENT OF THE INTERIOR

"Have Faith. . . Faith is the miracle worker of the ages. The men who reached the shores of this continent and piloted their way through the forests and across the lakes and opened up these unknown regions, those men were creatures of faith. . . We in this war also have faith. There has been no adventure at any time that reaches the dignity of this. . . We are making war for an ideal, for a faith—a faith that self-governing man can bring about a civilization more noble than any the world has ever seen."

We who live in cities are losing something. We are losing identity with the soil of the country itself. You will never be able to make a great nation unless you preserve a great body of the people upon the land and identified with it, and having it as their own to use. Here is a plan of reconstruction after the war that will make a great part of our western country, and that upon the most simple lines. We have along the lines of the Colorado River a million or a million and a half acres which can be irrigated if we will dam that river and develop power and hoist that water onto the mesa. I would take enough men to build those dams from the returned army, to put up that power plant, and I would pay those boys in farms upon the mesa itself. Let each man have his 40 acres of irrigated land, with a house, with stock and let him pay Uncle Sam in labor for it by constructing the works that make it possible.

I would follow that course along the other rivers of the west in the arid and semi-arid sections. I can give to you 4,000,000 acres of irrigable land if you will give me the hands that will build the dams and dig the ditches. Then I would come to this Mississippi Valley. Away below you have 15,000,000 acres of over-flowed lands. Build dikes, and save that land, and divide it among the men.

Up to the north you have the cut-over lands and the swamp lands. Take them from those who have them, at a reasonable figure, pull up the stumps, build houses upon the land, and let the men have 40 years in which to pay.

I do not want to give these men one single thing. Charity—I do not like the word. You remember John Boyle O'Reilly's line,

in his poem of Bohemia, in which he speaks of those:

"Who deal out a charity scrimped and iced
In the name of a cautious, statistical
Christ."

We want to deal with these men upon plain business grounds, not as giving them largesse, but as giving them opportunity, and unless democracy means opportunity, it means little.

The one distinction that you can draw between the kind of government that we are fighting and the kind that we live under is the distinction between control, direction, authority, autocracy, and individual opportunity. We have our chance. That is democracy. We must have our chance. Heretofore that has been represented only politically, but there is another kind of democracy besides political democracy.

The great name of the last century was George Washington. George Washington represented political democracy. He wanted the power lodged in the hands of the man, the vote, so that that man could determine for himself and for his fellows what kind of government he should have, how that government should develop and what kind of national life should obtain. That is the foundation of all democracy.

But beyond that is the democracy for which I stand and into which we will surely grow, a democracy which is social and economic. The representative of that democracy will be Lincoln, the man from Illinois. As Washington represents the last century, so Lincoln, I believe, will represent this, because Lincoln stands for what? Lincoln stands for sym-

pathy; Lincoln stands for understanding of the other man's desires. Lincoln is the man who holds out his hand in helpfulness; not with gifts but in helpfulness and faith. That is the type of man who is to be the master of our hearts and our heads during the days that are soon to come. Our government is going to grow along those lines. We are to sell something that is worth while when we sell democracy to the man who comes from across the water. We will give him opportunities such as he never has had, because we are going to save for him personal independence, personal initiative, and at the same time do as a community what a community can best do.

I do not believe in the theory that all enterprise can be carried on by the government wisely and well, because those of you who have had administrative experience know that managerial ability is rare; that governmental methods are wasteful; that there are things which have been standardized which can safely be left to the hands of government, but that, above all, we must save personal initiative, the inventive power of the human mind. God has given to us something called a mind, which has a radioactive power, from which comes light and heat. Put the compressing hand of government upon that mind, and it atrophies, it deadens, it dies. The purpose of liberty, the purpose of democracy, is to keep that mind lively and vital every moment, so that whatever is in it no matter where it comes from, may be given off for the benefit of men. It is only from a free people, with free minds, that the world gains; and so government itself must not compress. (Concluded on page 76)

Industrial Idealism the Motive Power of American Progress

We Have Outstripped the World Because of the Genius and Power of Vision with Which Business Men Have Led the Way

By R. GOODWYN RHETT

Retiring President of Chamber of Commerce of the United States

IF we look back upon the practical application in recent years of the discoveries and inventions of science to the uses of man, and contemplate the marvelous results which have followed, we cannot help seeing everywhere the part which the business man has played in it all. His genius has so guided the forces of man in their mastery over the forces of nature, and his enterprise and energy have so rapidly and highly developed them, that no other nation has been able to keep the pace. In all this empire building it was the business man who furnished the leadership, —who had the vision and the courage to follow that vision to realization.

But if the development of the resources of America to however remarkable an extent were the sole achievement of its people, I would find little pride in the part which the business man of whom I speak has played in it. It is not alone the material growth and expansion of America of which we are proud, but also its spiritual development into the great champion of human liberty in its broadest and highest sense.

When the President sounded his call on April 2, 1917, in which he set forth the reasons for which we must fight, it sent a thrill through the business men of the country; —and through every other true and loyal citizen whatever his class or calling; —because it rang true. It

struck a note which harmonized with their own ideals and principles, and proclaimed a purpose which was deep rooted in their own souls.

In taking this splendid part in the making of America, the business man has raised his own estate to a higher plane. There was a time when industry and trade were looked upon as soulless and those engaged in it merely money makers. The business man has ennobled industry and trade. He has created a new nobility for the people of a nation in those who serve for the common welfare, —not for themselves only, but for the nation as a whole. For idleness and selfish greed, this business man to whom I refer has only contempt or pity. He has broadened and strengthened confidence and credit, by making it the foundation of successful business and casting out those who abuse it. Yes, he has played a part in the making of America of which he may be justly proud and the nation may be profoundly thankful.

And when the great crisis came upon us and it was realized that America, with all its ideals, all its achievements, all its aspirations, was in danger, thousands of business men laid aside their work and without thought of the cost and sacrifice, tendered their services in any capacity, however humble, to aid the government.

When the history of it all has been written,

there will be no room for doubt as to the vital part the business man has played in shaping the industry of the country to the new demands suddenly thrown upon it, nor will there be any doubt as to the extent of the accomplishments. It is no new thing to find the critic and fault-finder even in the great crises of nations, in times of stress, when the thoughts of all should turn to helpfulness only, who see nothing but the mistakes that are made and predict nothing but disaster. What has actually been done to mobilize the resources of the nation and direct them to the purpose of winning this war will in due time become apparent and be properly judged and appreciated. Mistakes will have their proper value along side of achievements.

The Foe Within

IT is not enough for the business man to turn his genius to the saving of America from the menace of German militarism. There is another equally important part for him to play in preserving America from the foes that threaten her from within. That unrest has arisen by reason of the distribution of the great wealth which has come to the people of this country, through industry and commerce, and the comforts and enjoyments it has brought its possessors, is not to be questioned. That it (Concluded on page 74)

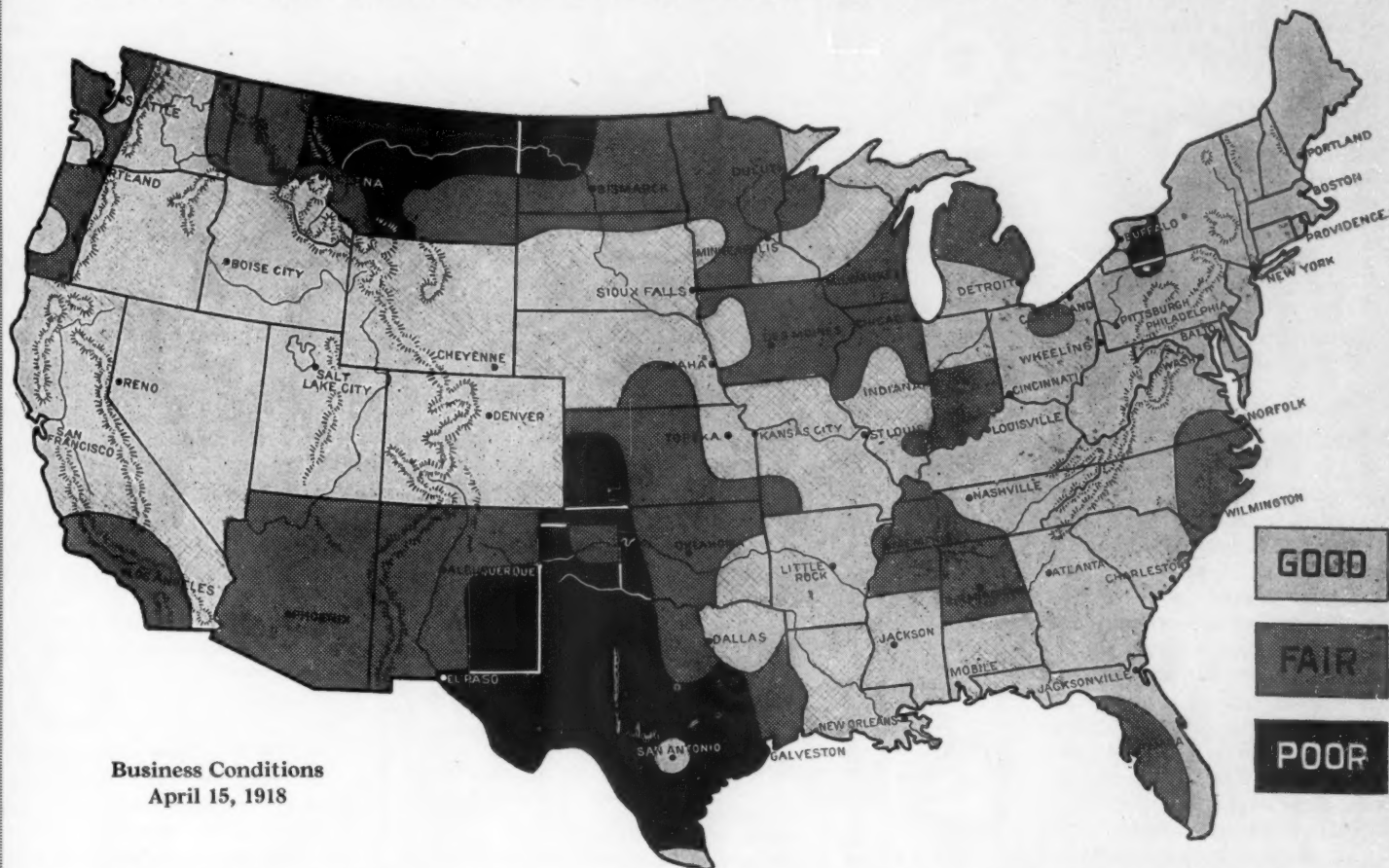
Winter Wheat Looks Up Under Stimulating Rains as Shipments to Allies Increase

By ARCHER WALL DOUGLAS

THE story which traveling salesmen bring from the four corners of the United States is the recital of business done under conditions without precedent in our history even in the days of the Civil War, and this is equally true of all sorts and conditions of business. All dealers alike, both retail and wholesale, have largely lost sight of the usually important matter of price in their eager desire to replenish much depleted stocks of merchandise. It is not that the volume of domestic business is in greater measure than in the past, for such is not the case, but

drills and many mechanics' tools, in carpenters' tools used for ship building and in handles for all manner of tools, the domestic dealer and the domestic user gladly takes what he can get and accepts any possible substitute.

A short time ago I attended a convention of business men gathered in the halls of one of the great state universities of the West which seek to be not only institutions of learning, but equally to aid and counsel the people in their states in every phase of economic and social life. The story of this convention was a

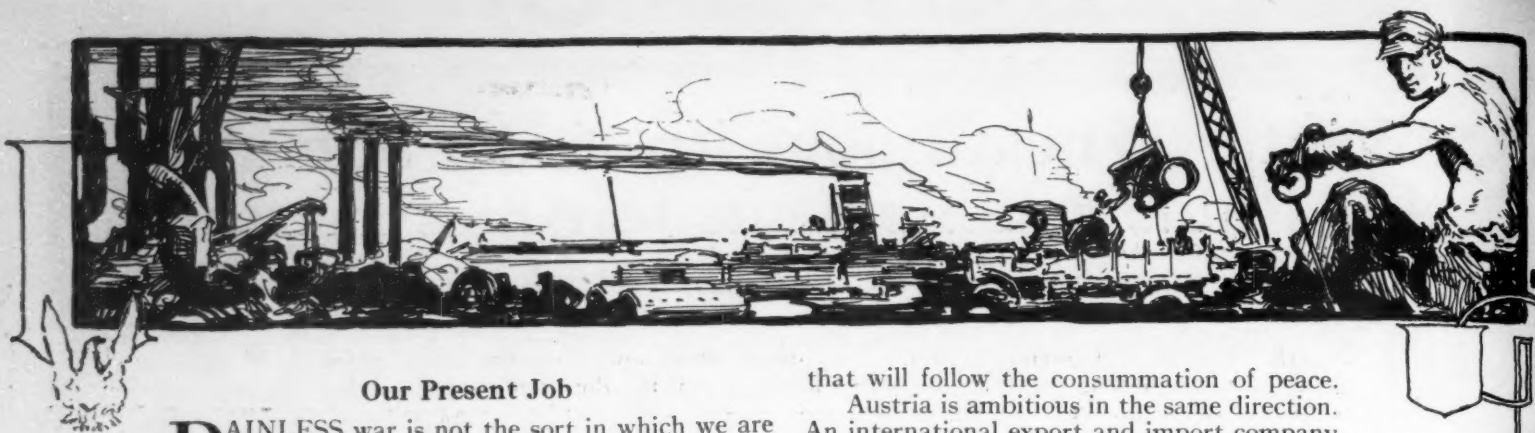


rather than the prevailing scarcity of commodities, due largely to inadequate transportation facilities, creates a demand which for the nonce seems impossible to satisfy.

It is not difficult for the merchant to sell goods in most lines, if he has them in any quantity and in complete assortment, or nearly so, for such an one is as lonely as a sparrow on a housetop and a lodge in a garden of cucumbers. For all dealers, both of high and low degree, know that at the end of the passage there waits the consumer with more money in the main than ever before, and many of him with an ability for spending which is likewise new to his experience.

The steadily growing volume of Government needs and purchases is the dominant factor in many lines, thus causing an equally growing scarcity, for naturally and properly this demand takes precedence of all else. In some lines, as for instance in files, twist

microcosm of every similar gathering in the country. The members were there for the sole purpose of learning from each other, and from the speakers who addressed them, how to conduct their business so that they might most contribute toward winning the war. But they were as weary of the endless and impracticable advice which they got in daily print from would-be leaders as was the Jehovah of Ancient Israel of the New Moons, and Sabbaths, and the solemn assemblies of his people, as narrated by the Prophet Isaiah. Curiously, yet naturally enough, they were not immediately concerned about the future. For what is the use? It is unfathomable at best, and anyhow promises to go on much the same as now, or rather more so, as long as the war lasts. But they were most eager for genuine, reliable news of all the business conditions of the day. And in default of such basic facts they were fain to fill their desires with the husks of unrelated statistics of even (Continued on page 86)



Our Present Job

PAINLESS war is not the sort in which we are now engaged. This is no war *de luxe*, embellished with trappings and social eclat, and all the rest of the fanciful things in fairy books. Individuals here and there may have some such notion. They are destined to a violent and uncomfortable disillusionment. This is a war of might,—the honorable might of peoples outraged in every noble ideal of peace and humanity they have set before themselves,—against primordial fury.

To obtain the might that will overcome the force that has been let loose, and that will stay its destruction, creature comforts must be yielded. Personal sacrifice must become a national creed in every walk of life, private and official. The cost is not to be counted merely upon the field of battle. It is to be reckoned still more at home. For the more the loss is assumed in each factory, town, and village,—by every person behind the lines, at home, whether in positions of executive responsibility or at lathe, plow, or desk,—the less the cost in the ready youth that man the trenches.

For a year we have been hardening our muscles. It is time to twist them with pain, until they swell and throb with power for the work that is before us.

The World's Drive For Foreign Trade

COOPERATION in export trade is to have a big place in international commerce. Our own legislation to permit it upon the part of American exporters went upon the statute book on April 10, after being urged over a period of four years. Briefly, our law now allows cooperation in export trade on four conditions,—that on the part of a cooperating group there be no selling for consumption or resale within the United States, that there be no act which artificially or intentionally enhances or depresses prices within the United States for the class of goods exported or which substantially lessens competition or restrains trade within the country, that restraints are not placed upon the export trade of domestic competitors of the cooperating group, and that there is supervision by the Federal Trade Commission.

Our law has come none too soon. It had scarcely been approved by the President when our Bureau of Foreign and Domestic Commerce came out with a description of Germany's plans for foreign trade. Since this book went to press German preparations have further developed. An export trade company has been founded in the German ministry of economics, and with the express purpose of pushing German business as soon as the war closes, in the eighteen countries that are now at war against it. This company represents large commercial and industrial associations. Syndication of German industries for export trade was far advanced before the war began; it is now becoming even more extensive in preparation for the days

that will follow the consummation of peace.

Austria is ambitious in the same direction. An international export and import company in Vienna is absorbing export firms which before the war had international connections. This concern will act in harmony with a like organization in Hungary.

For increased cooperation in export trade England has had a committee studying its industries. In February it declared the future of the nation depends to a large extent on increased cooperation in its greatest industries severally. Shipbuilding, shipping, textile manufacture, and lace and hosiery trades are among the industries in which the committee especially asked cooperation for export purposes.

All these movements give assurance that foreign markets are to have a new importance in the national economy of the leading nations.

Combing the World for Seeds

SEEDS have recently had more attention than anything else in many parts of the world. War has drawn a line around the belligerent nations and dictated that they shall depend largely upon the products of the soil they can obtain within their new bounds. What this means is in a measure apparent from announcements in the House of Commons that England, which uses three and a half billion dollars' worth of food a year, must get sixty-five per cent of it from Canada and the United States. Wheat to the value of one hundred million dollars lies in Australian ports for lack of ocean tonnage,—all of the crop of last year and some of the crop of the year before; new wheat must be grown within the bounds set by war.

Seed is the prerequisite in this state of things. Our own government and the Canadian government, our states, and our agricultural communities have all attacked the question of supply. But seed for food crops is not the whole story. There are other crops of great importance the ordinary sources of which have been placed beyond the pale of war. For example, there is flax, which furnishes the fabric *par excellence* for aircraft, and for which the mills of allied countries depended upon Russia to the extent of eighty per cent. Ireland is trying to make up a part of the deficiency by reviving her waning culture. Seed has been gathered from Russia, Ireland, Japan, Canada, and even the United States, where the fibre variety of the plant,—the sort now needed,—has never had much vogue.

This year's seed offensive has been about as vital as the contemporaneous spring drive on the western front.

Figuring on Butter but Eating Margarine

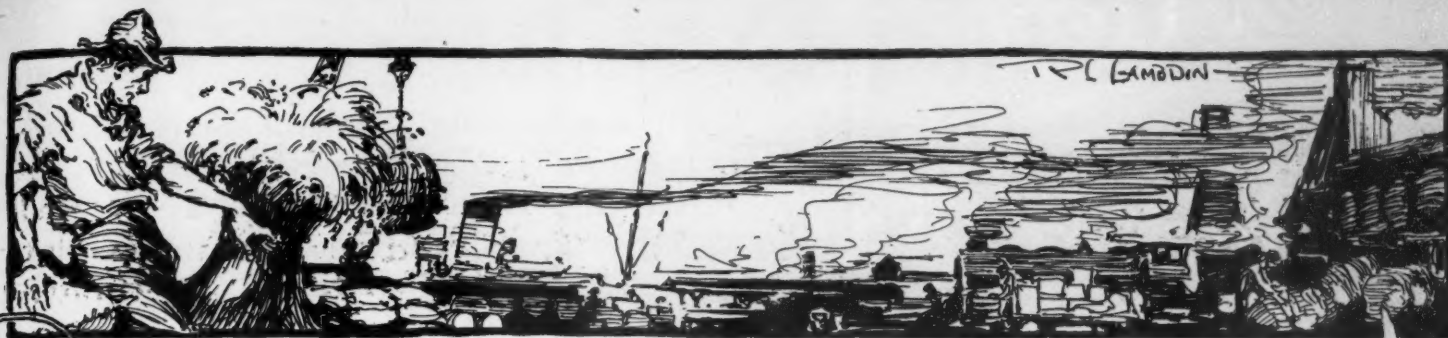
THE cost of living is an uncomfortable thing, but intangible and elusive. When one British official had statistics,—and very exact statistics, too,—that showed

And Now the Sugarless Sweet

SUGAR in the antipodes may be had according to the individual appetite, and at six cents a pound. Possession of a sweet tooth in France, however, entails real sacrifice. If one fares forth there to dine at a restaurant he must carry his sugar with him. He may have two main courses provided he eats no more than one roll, and he may have soup, hors-d'oeuvre, or oysters, and an ice for dessert, but the ice must be sugarless!

The taste for sweets is just as insistent in Canada as anywhere else. There is a Canadian drive upon our supply of bees, and this spring a popular slogan north of our border was "bring out the old sap bucket," for the sap flowed generously and delectable maple sugar will this year have a bigger place than ever in the Canadian domestic economy, that more of the cane sugar may go to England and France.

The sugar ration is actually less today in London than in Berlin, although London has an overwhelming advantage in all other parts of the ration, getting almost twice as much meat, and being unlimited in potatoes and bread.



an increase of one hundred and more per cent between the beginning of the war and the end of 1917, another equally competent official demonstrated that although his contemporary had started well, by taking in 1914 the things persons in ordinary circumstances purchased, he had ended with a hypothetical situation; for he was still in 1917 figuring the price of butter, for instance, whereas even the king had changed to margarine. Figuring on butter and the rest in 1914 but taking margarine and its war-time companions in 1917, the critic alleged reasons for putting the increase at 53 per cent. The upshot is that no one knows how far the cost of living has become dislocated.

Perhaps no one can decide, exactly. There are too many elements to permit an outright statement. For one thing, there is no precise standard of living, and such as there is shifts hither and yon with prices.

Possibly the best that can be done in the way of statistics is to deal with prices. For many articles they have necessarily risen because of a diminution of supply for civilian use. With the government and the Allies taking one-third of our pack of canned tomatoes, 40 per cent of the capacity of our woolen mills, and so on, those of us who are outside the armed forces compete for lessened supplies, and prices go up to cause us to get some extra wear out of old clothes and find a substitute for canned tomatoes.

The substitutes, too, have risen in price, we discover,—partly because of an enlarged demand for them and partly because of credit inflation, the by-produce of governmental borrowing for the expenses of war. If some genius will contrive a formula by which each of us can measure the different causes for increased prices, he will add immeasurably to human happiness.

Virtue in an Empty Pantry

HOARDING food is being made decidedly unpopular in England. A steel manufacturer who had a cache of lobsters, salmon, canned fruit, bottled soup and the like went to jail for a month despite his protests that he was merely accumulating materials for teas in the interest of his office force. Eleven sacks of potatoes cost one man two months of hard labor in jail. A member of Parliament protested in vain that his stock of 500 pounds of flour, with rice, sugar, tea, and syrup was only enough for his household of 19 persons and the guests he ordinarily had at week-ends in the 30 bed rooms of his country house; the court held he had a supply for 37 weeks, fined him \$1650, and confiscated the lot. Eight hundred pounds of tea in the storeroom of a poorhouse cost the parish council a fine of \$100. Although a housewife tried to excuse 40 pounds of syrup, 56 pounds of beans, 64 pounds of jam and 76 pounds of rice by citing the enormous appetite of her father who, she swore, measured six feet two inches in height, she had to pay fines of \$100.

Houses Wanted

HOUSING will have its place in later problems quite as much as in the midst of the industrial activities of war, if England's expectations afford a criterion.

By the end of 1918 England expects a shortage,—computed much in the way we used to arrive at car shortages, by comparing the unmet demands with the surplus over requirements,—that will amount to 300,000 houses. If each of these houses is constructed after the plan of the modern British cottage, with a living room, a kitchen, and three bed rooms, a man with a penchant for statistics declares that there will be needed 6,000,000,000 bricks, 3,000,000 doors and frames, 300,000,000 roof tiles, 120,000,000 slates, 23,400,000 square feet of glass, 2,500,000 windows, 500,000 tons of cement, 600,000 tons of lime, and 300,000 staircases.

As England has never seen more than 150,000 houses built in a year, it looks forward to a shortage in materials, and the Minister of Reconstruction has accordingly appointed a committee to consider ways and means.

Other misuses of food bring penalties these days. A maiden lady who bought meat and fed it to her St. Bernard dog paid \$250. A justice of the peace who is a teetotaler fed his harvest of barley to hogs and was fined \$150. A merchant paid \$250 for letting a sack of wheat get damaged.

Dealers, too, find that disregard of government food regulations is no light matter. Watering milk brought fines of \$750 on one dairyman. A sale of oatmeal at 39 cents a pound instead of 36 cents resulted in the grocer paying \$125. Serving more than two ounces of cake to patrons between three and six o'clock in the afternoon,—the Englishman's sacred tea time,—cost a moving picture theatre \$250. Insistence that a customer buy a kidney with the two chops she wanted brought down a fine of \$500 on a butcher, as "conditional" sales are not tolerated. A charge of more than the maximum for butter led to a provision house being mulcted of \$5500. Altogether, the food regulations are being made great realities, in England.

Setting a Pace for Us

COMMERCIAL attaches are worth having, in England's estimation. These British officers of trade intelligence are to be stationed in sixteen countries, and several of them in each of the more important countries. For instance, there are to be two in Argentina, Belgium, Brazil, Scandinavia, France, Italy, Japan, and Spain, and three in China and the United States.

Salaries, too, will be liberal. Commercial attaches of the highest rank will receive as much as \$7500 a year increased, in the case of such an officer in the United States, through allowances for office and other expenses by \$20,000 more. That amenities may not be lacking such an officer has to spend at least \$2100 on entertainment.

Both in numbers and in expenses the British service of commercial attaches will outdistance our own, so far as our present plans go.

New Styles in Business Effect of War

THE business effect of war is hard to gauge by industries, as a matter of forecast. The actual course of things is much easier to trace in times when conditions take all sorts of unexpected forms.

European countries have had almost four years in which to ascertain what would really happen. In Italy, for example, the war is said to have benefited the silk industry; cotton and woolen fabrics have advanced in price until silk has frequently had a chance to compete on a basis of cost. In the face of real difficulties in obtaining raw materials, Italian cotton manufacture, too, has thriven and increased its exports. Mills deprived of Russian flax have turned to Italian hemp, and there has been much more fundamental shifting in industry, with a sum total of result that is better than might have been expected. There is a demand for labor (Continued on page 83)

Trucks for the Roads— Roads for the Trucks

We Are Getting the Trucks—Now the Question is Where and How We Shall Build the Highways Which This New Form of Transportation Makes Imperative

By F. A. SEIBERLING

President, Goodyear Tire & Rubber Company

THERE has lately come into the field a new piece of machinery which has already afforded partial relief to the railroads, whose facilities are admittedly inadequate in the present emergency. That new machinery can be, and I believe will be, expanded until it furnishes complete relief.

I refer to the motor truck.

The introduction of the motor truck into our commercial life sounds the death knell of the short-line railroad. Perhaps never again, except where heavy tonnage is to be handled, will short-line railroads be built in this country. Due to its proved economic value, the motor truck is moving irresistibly forward, and now will be forced by the pressure of war necessity to do in a year or two what economic efficiency would have in the years to come led it to do anyhow—dominate completely the short-haul field.

As we will substitute in our short-haul traffic the motor truck for the freight car, so will we substitute the permanent, continuous, paved highway for the steel rail and rock-ballasted road-bed, and the loading and landing platform of the individual shipper for the railroad yards and the freight terminals now congested with freight which has no business there. The motor truck carries with it its own terminal facilities, taking a product from the point where it originates and delivering it to the platform where it is to be used.

This method of short-haul freight transportation would have to be adopted even if the cost were the same or greater than rail delivery. But the fact that it is cheaper, quicker and more efficient than the short-haul railroad assures the permanent use and development of motor truck transportation.

Within a range of 50 to 100 miles, the motor truck is today easily a competitor on better than even terms with the railroads. All that is needed to widen the limits of this zone is the building of hard-surfaced highways of adequate strength. Such highways we must have. It is no longer a question of whether we should or should not build them with money, labor and equipment which it was at first thought could be better devoted during the war to other purposes. The only question is where and how these new arteries of traffic shall be constructed.

Who is to determine this? Are our present agencies adequate to meet this question and solve it, quickly and effectively?

We have approximately 2,500,000 miles of highways, of which approximately 10 per cent have had a so-called "improvement"—ranging all the way from sand-clay or a superficial gravel surface to the more expensive macadam or the modern hard-surfaced brick or concrete.

These roads were designed to carry traffic as it existed prior to the introduction of the motor truck for other than urban hauling. Within a few years these roads will go to the scrap heap, giving way to new types—wider, more solid and more enduring. Who is seeing to it that construction even now under way, with

ordinating the scattered and oftentimes ineffectual efforts of the twenty-five or thirty thousand separate, distinct road-building organizations, or of seeing that their individual efforts accomplish proper results. In the past they have gone ahead with local needs in mind and built such roads as local (frequently uninformed), opinion and experience dictated, or local, meagre road funds allowed,—or worse yet, local politics made expedient. The Government's efforts to bring into effective use motor truck transportation has given us a picture of the results accomplished under this system—or lack of system. Often long stretches of good road might as well be non-existent, so far as the purposes of through transportation are concerned, owing to the lack of one or two miles of improved road which the local community it traverses did not find it possible or expedient to construct.

Our expenditure for roads, it is estimated, has been for several years past over \$250,000,000 a year. Yet approximately only 10 per cent of the total mileage of roads in the United States has received any attention whatever; and less than two-thirds of that 10 per cent is in any way adequate for the type of transportation we are considering. Furthermore, even this proportionately small mileage of road improvement does not, as I have shown, link up to form what can be called a road system. It is scattered; its usefulness for interstate freight transportation is negligible. An immediate building programme designed to connect up existing scattered construction is essential.

Our lack of a national plan, our lack of a national directing authority is leaving to nothing more than chance, or the voluntary co-operative efforts of adjacent local road-building organizations, the ultimate development of through connecting main line highways thus needed.

It is estimated that approximately 20 per cent of our roads will carry from 80 to 90 per cent of our traffic, so that 400,000 miles or so of permanently and properly constructed roads in the right place in this country would practically complete our necessary highways. At the same rate of expenditure, such a national system could be achieved in 20 years without expending a cent more than we are now expending, if some central authority empowered by the Government would designate the roads to be built. The same authority, by promptly indicating the immediately necessary war roads, could bring about their uniform improvement at once with funds already available.

The Government (Concluded on page 56)

THE FLAG AT SEA

CHARLES LEROY EDSON

SHIPS, ships, ships, they are beating back to sea,
Sloop, barque and brigantine (Calling "Come with me")
Ships from the slips where the rusty anchors ride,
Long forgotten bottoms where the silt piles creep,
Now nosing down the channel to the blue sea tide,
Breasting through the billows to the storm-tossed deep.

The bold flag of Farragut
Flaunting down the bays,
Gleaming o'er the harbor bars,
Through the waterways.
"Damn—the—torpedoes!"
As in the olden days
When Freedom's starry banner put to sea!

Wheat ships, meat ships, commerce with its bales,
Steel ships, wooden ships, schooners with their sails,
Gay girls gliding through the white wreathed foam,
War ships beckoning down the ocean lane,
Dreadnaughts bowing low—"See you safely home."
Freight ships and battle ships tramping o'er the main.

The old flag of Farragut,
They've nailed it to the mast,
Over all the salty seas,
As in the golden past;
"Damn—the—torpedoes!"
We ride 'em down at last.
For Freedom's starry flag is on the sea!

public money even now being expended, will produce roads of the kind we know the future will require?

We have today 400,000 motor trucks in service in this country. Those competent to judge estimate that within five years after the war shall end, this number will exceed 4,000,000, and that nothing can stop this great economic movement except the failure (which would be a national calamity) to build hard-surfaced roads of adequate strength.

We know we can get the trucks. Their development is even now far ahead of what most of our highway mileage warrants.

What steps are we taking to see that we will get the roads? What is needed to assure the proper development of our main line highways? What agencies exist to determine where these highways shall be built and where they shall not be built, and to direct the proper expenditure of the hundreds of millions which they will cost?

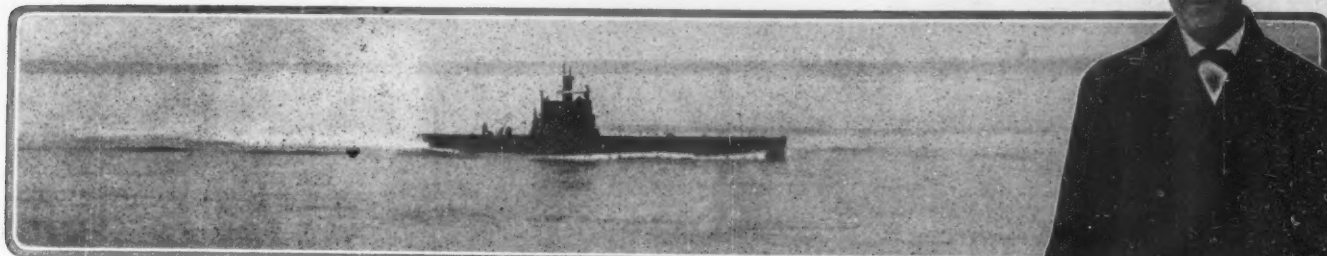
We have no centralized directing authority in this country, either for the purpose of co-

"The Neck of the Bottle Is Ships"

Business Men Have a Larger Opportunity to Help in Procuring Tonnage Than Any Other Body of Men in America Except the Ship Builders

By JOSEPHUS DANIELS

Secretary of the Navy



"I call on the representative business men of America, the business men of vision, the business men of power, to give themselves in solemn dedication and in the spirit of putting on the uniform; to make sacrifice and then to make more sacrifice until we have won this war."

THE navy of America has been busy in recent years. It has been busy making ready for the call that came to it. On the sixth day of April we declared war. On the fourth day of May we had a flotilla of destroyers across the water. We had another on the seventeenth of May, another on the twenty-fourth; and on the sixth of June we landed naval aviators in France.

What the young men of the Navy are doing the young men of the Army are doing. I sometimes feel that it is a great loss to the world, that those of us who are older, with most of our lives behind us, could not make the sacrifice instead of letting these boys, with all the promise of useful careers before them, fight the battles of democracy. But they are going, and going willingly and freely. Ten millions of them will soon be ready. The only thing that stands between us and sending millions of men this year is the lack of ships.

We need ships, ships, ships! The paramount need of America today is ships. To business men I would say, you have a larger opportunity to help the Government in procuring tonnage than any other body of men in America, except only the shipbuilders. Business men are in touch with labor, and with capital, and with the government; and in their communities they should feel that the responsibility is upon them, as it is upon the government.

The American people had almost forgotten how to build ships. In the early days of the republic men had a vision of an America with a commerce extending all over the world; and our flag was seen everywhere.

Our experience since war was declared with Germany has furnished us with another illustration—if one were needed—of the intimate dependence between the Navy and the merchant marine in time of war. Some hundreds of years ago they were almost indistinguishable. Fighting naval vessels were quickly obtained by taking the merchant vessels of the day and mounting guns upon them. There were a few regular or permanent men-of-war, but the difference between the merchant vessel and the fighting vessel was comparatively small.

In these days naval vessels proper are among the most highly developed and complicated structures built by man, and a navy obtained solely by conversion of merchant vessels would

be practically useless. Nevertheless, the battleships, destroyers, and other special fighting craft must still obtain sustenance, aid and assistance from vessels of the merchant fleet.

Small commercial vessels and yachts are readily adapted to the purposes of patrol, etc., and the Navy has taken over and is using, of privately owned vessels, a good many more than the total number of naval vessels of all kinds at the beginning of the war. Apart from that, the Navy has largely converted our merchant marine into fighting vessels, supplying merchant ships traversing the submarine zone with guns and gun crews. As all know, these armed merchant vessels have given a good account of themselves in stand-up fights with the submarines. Here we have a repetition of ancient history, when the stately East Indiamen carried batteries and crews to defend themselves against privateers and pirates.

The records show two periods when our merchant marine was relatively large. More than a hundred years ago our foreign trade was prosperous and the amount of our shipping was at a peak. The war of 1812 was brought on by the refusal of Great Britain to recognize the rights of the sailors of our large and flourishing merchant marine. I may remark, in passing, that just as we were forced into the war of 1812 by aggressions against our sailors, so we were finally forced into this war by the ruthless murder of the sailors and passengers—men, women and children—of our merchant ships.

What We Are Building

SOON after the War of 1812, a period of decadence set in both for the merchant marine and the Navy. Fifty years later, or just before the Civil War, we find the American merchant marine again at the summit of a peak; but soon a period of decline set in with the era of iron and steel ships; and of late years the American merchant marine has not been conspicuous upon the ocean. This is not because the American genius is not capable of building and operating ships. Those who live upon the Great Lakes have constantly before them the object-lesson of ships built and operated with efficiency as great as is to be found anywhere in the world.

Just prior to the War of 1812 and the Civil War, our merchant marine was numerous and

prosperous. The opposite was the case prior to the war we are now engaged in.

I firmly believe that when this war is over we shall see the reverse of what happened after the War of 1812, of one hundred years ago, and the Civil War of fifty years ago. We shall see a period of expansion of the American merchant marine, and not again in our generation will it be a negligible quantity or a minor factor in the life of our country.

We are experiencing now in time of war necessarily intimate and close relations between the Navy and the merchant marine. We look abroad and see the same thing in Great Britain and the other allied countries. The merchant marine of our enemies is quiescent at present, but we know that even in time of peace, the relations between the Navy and the merchant marine were close, and that every German merchant vessel was, in the last analysis, at the disposal and under the direction of the Admiral Staff of the German Navy.

I like to think that after this war is over, the close and intimate relations between the American Navy and the merchant marine which are necessary in time of war and which other nations have found necessary in times of peace, if they are to be prepared for war, will continue. Admiral Mahan, who was a prophet as well as the wisest and ablest writer on sea power, understood the intimate connection between the Navy and the merchant marine. In one of his last books he tells us:

"The necessity of a navy in the restricted sense of the word springs, therefore, from the existence of a peaceful shipping and disappears with it, except in the case of a nation which has aggressive tendencies, and keeps up



© HARRIS & EWING

a navy merely as a branch of the military establishment. As the United States has at present no aggressive purposes, and as its merchant service has disappeared, the dwindling of the armed fleet and general lack of interest in it are strictly logical consequences."

Since April 6, 1917, the day that war was declared, there have been added to the ships of the Navy of all classes 1275, aggregating 1,055,116 tons. In addition to the battle cruisers, dreadnaughts, and scout cruisers authorized, some building and others deferred temporarily for the more pressing construction of ships to transport soldiers and munitions and supplies, we are now building what is technically known as smaller craft, from 65 to 1215 tons each, 794 vessels with an aggregate tonnage of 420,217 tons.

We are now working day and night in government and in private plants, on the construction of more American destroyers than were in all the Allied navies when war began, and every possible facility is being created to construct additional fighting craft which can be effective against the submarine stiletto warfare of assassination and murder.

The battle cruisers and the dreadnaughts authorized—some of the dreadnaughts are being pushed to completion—will be the largest battleships afloat with the biggest guns yet placed on fighting craft. Though the Navy cannot, until new facilities are created, begin the construction of larger fighting craft, the pending naval bill carries appropriations for additional dreadnaughts and battle cruisers which will be completed as soon as it is humanly possible.

Get the Munitions Across

MUCH as I regret any delay in their construction, the interests of the Government are superior even to the needs of the Navy. Next to destroyers and submarine chasers and the *Eagle* class being built by Mr. Ford, the supreme need of this hour is ships to carry millions of soldiers to France and ships to carry munitions and supplies to them. So that, until additional facilities are created, the Navy must share with the Shipping Board the existing facilities to meet this pressing and paramount requirement that we put into the trenches our maximum strength in minimum time.

We are by no means resting on our oars. In addition to helping to secure ways in private plants, we are building as rapidly as conditions permit ways and ships at Philadelphia, Mare Island, New York and Norfolk for the construction of the biggest ships, and in other navy yards making ready or actually building ships of less tonnage.

Four years ago there was only one navy yard in America that could build a dreadnaught, and it could only build one in three years, and there were only four other yards equipped to build dreadnaughts. One of my first acts as Secretary of the Navy was, without waiting for the action of Congress, to begin building ships of 12,000 tons at Boston and Philadelphia, and the regret of this hour is that during the past dozen years when expansion would have been quicker and less costly, American leaders lacked the vision to provide the government yards the facilities which today would be more valuable in winning the war than ten times the money such enlargement would have cost.

The papers under a Washington date line, recently stated that in March an increase

of 20 per cent in the amount of tonnage across the Atlantic had been gained, and that the better conditions assured will give an increase of 30 per cent. We are told that today 390 vessels under American control have a tonnage of 2,762,605 tons. In addition 471,000 tons of Dutch ships will soon be put into the service, and ships under construction will help fill the ever increasing demand as the building programme shows larger accomplishment in the summer.

These statements are heartening, but the growing need calls for the fullest cooperation of private enterprise and the stimulation of production of ships in government and private plants. The neck of the bottle is ships. The crying need is ships and ships and more ships. It must not be understood that larger and quicker production should not be ac-

IT is a great pleasure to speak to an association which since April 6, 1917, has known no business except helping to win the war, and has put aside every thought except the success of the nation at arms. I have come in such close and intimate touch with the many members of this Chamber and its representatives in all sections of the country that I wish to say to you that the progress that has been made would have been impossible if the business men of America had not enlisted as truly as the men who have donned the uniform."—Secretary of the Navy Daniels to the Sixth Annual Meeting of the Chamber of Commerce of the United States.

celerated in munitions and supplies and aircraft of all kinds; but to make those effective soon by building a bridge across the Atlantic we must make everything bend to securing more tonnage and increasing its usefulness by eliminating every hour of delay in loading and unloading cargoes of men and material.

There is no trouble about securing men. Courage and willingness to fight for liberty are the commonest and the most glorious of America's possessions. Daily the production of guns and munitions and supplies is proving the efficiency of American industry, and soon there will be no lack of anything that will aid toward victory, if we can land it promptly in France and transport it quickly to the front.

The visit of the able Secretary of War to the center of activity has already borne fruit in better unloading and shipping facilities across the sea, and his assurance that in material and men "Full Speed Ahead" is the order of the day in America has cheered our troops in the trenches and heartened our allies across the seas. To the fulfillment of this pledge by Woodrow Wilson, now acclaimed everywhere as the spokesman of world freedom, a pledge conveyed in person through his Secretary of War, there must and will be the fullest cooperation of all men in industry in America. The Chamber of Commerce of the United States, with its wide ramifications, will be one mighty agency in bringing about with speed the result upon which hangs the fate of civilization and free government.

Three years ago there was introduced into the Congress of the United States a bill to put the Government into the business of building a merchant marine. Many of the leading men in America opposed it. It passed the House of Representatives and went to the Senate. The men who put theory above national necessity said they did not propose to put the Government into the shipbuilding business, and they defeated that measure, the most constructive measure except the Federal Reserve

Act that has been introduced in 20 years.

If that bill had passed at that time we should have had, under the direction of the Secretary of the Navy as chairman of the board, enough slips and shops to have built more merchant marine ships than the Shipping Board, working with all patriotism and energy, has been able to build in the hurry and haste without facilities during the year.

I have come to the conclusion that the hour has struck when what the Government shall do must be determined by the demands of the present hour. The Government of this republic must do those things which in our day are essential for our progress and our development and our defense.

We should have a merchant marine in peace, by which the Government should pioneer new marts of trade—send government ships with the products of our mills, factories and farms to every nation that does not trade with us; and when the government has pioneered those routes, and developed trade, then private enterprise should be given opportunity to carry it on, and let the Government pioneer new routes and establish new customers.

It is a matter of satisfaction and thanksgiving that during this year, when we have transported every soldier for whom there was shipping, not an American transport going to Europe has been lost. True, we lost the English ship, the *Tuscania*, but if it had been under our flag it would undoubtedly have been lost, because our English

allies are as alert as we are.

We are working, in the shipping business now, in cooperation with the Allies, and securing from them ships which, added to our own, will increase our efficiency. But every man of business with money to invest in building ships, and every man who knows how to work on ships, can use his money and can use his skill better in shipbuilding than in anything else under the sun: and I beg all business men that they shall get in touch with shipyards and shipbuilders, and lend them countenance and influence; and if any have first-class foremen and business men in their own industry who can help to build ships, let them give them up, and let those men help build ships.

Business Must Put on Uniform

WE have been living in anxious days and in serious days, days when men of faith have prayed to the God of battles to strengthen the army of liberty. We will have to pay heavy toll, but this is no hour for pessimism, this is no hour for optimism; this is an hour for resolution and solemn consecration.

I call the representative business men of America, the business men of vision, the business men of power to give themselves in solemn dedication and in the spirit of putting on the uniform—to make sacrifice and then to make more sacrifice until we have won this war.

Sometimes one hears men say that they do not think they ought to be called on so often to subscribe to bonds, or to the Red Cross, or other agencies. I say it will be time to quit subscribing when the boys on the destroyers quit fighting,—when the boys knee deep in mud in the trenches surrender, and throw up their hands,—and when our boys in "air navies grappling in the central blue," giving their lives for the cause, refuse to put their lives in jeopardy. Then will be the time a man might think he should stop giving, and not before, so long as he has a penny.

During this year I (Concluded on page 83)

The Horns of Our Railway Dilemma

We Haven't Enough Cars, and We Haven't Been Able To Use Even As Many as We Have—But There's a Way Out If Only We Have the Sagacity To Take Advantage of It

By **SAMUEL O. DUNN**

Editor of the "Railway Age"

DURING the last eleven years we have become accustomed to the use of the terms "car surplus" and "car shortage." The transportation conditions denoted by these terms have not, however, been solely conditions of car supply. They have been conditions of transportation supply in the broadest sense.

Paradoxical as it may seem to the uninitiated, you might actually have an excessive supply of cars upon the railways, and at the same time have reports and complaints of "car shortage" throughout the country. You may theoretically have sufficient cars for all transportation purposes, and yet have so many accumulated at seaboard ports or in terminal yards, or in the hands of shippers for loading and unloading, that the total requisitions made by shippers will exceed the number of cars the railways can furnish to them. These conditions may be due to inadequate facilities for loading and unloading cars, or to inadequate locomotive power; or to inadequate trackage or terminals. Such conditions actually have existed repeatedly.

In other words, car supply is not transportation supply. It is, however, an indication of the condition of transportation supply, the best indication of it that we have.

On March 1, 1916, for the first time in two and a half years, the American Railway Association reported a net shortage of cars. This was due mainly to weather conditions and to an acute congestion at the eastern seaports. It disappeared and did not return for five months. On September 1, 1916, however, a net shortage was reported again; and net shortages varying from 34,000 to 149,000 cars have been reported in every month since. This unbroken continuance of car shortage for over 20 months is without precedent in the history of American railroads.

After this country entered the war, it became impossible for the railways to get many new cars and locomotives. It is almost strictly accurate to say that the roads handled the enormous traffic of 1917 without any more cars and locomotives than they had three years before. Furthermore, many of the cars and locomotives used were such as normally would have been sent to the scrap heap.

Enter—Government Control

WITH the year 1918 we open a new chapter in the history of American railways, for here their operation was placed under Government control. There are not as yet available any statistics showing the amount of traffic which has been handled thus far this year. We do know, however, that owing to weather and other conditions, the business handled in January was less than in January, 1917. We also know that on March 1, the net shortage reported was over 138,000 cars.

This is one of the largest net shortages ever reported. Furthermore, it existed, in spite of the fact that numerous embargoes are being enforced which cause shippers to refrain from ordering cars which they otherwise would requisition. In other words, if it were not that many shippers know that it would do them no

good to ask for cars, it is probable that the number of cars asked for would be much larger than it is, and that therefore the net shortage reported would be much greater. It undoubtedly is a fact that the excess of the traffic which shippers have offered and would like to offer to the railways over what the railways can handle is vastly greater now than ever before.

Are we going to get any relief from this situation, and, if so, how and when? Theoretically, relief might be obtained by operating the present facilities more efficiently, or by providing additional facilities, or by both.

It would seem that it ought to be possible under Government control and unified operation to utilize the existing facilities more efficiently. If more efficient utilization is secured, it must and will be expressed in terms of more traffic handled with each locomotive and each car. You may secure this greater service from each locomotive and car either by moving traffic over routes which are shorter between the points of origin and of destination than those heretofore used, or by loading each car and each locomotive heavier without reducing the average speed with which they are moved, or by both means.

Rerouting Traffic

MANY people believe that a large increase in efficiency will be secured by moving traffic over the shortest practicable routes. But in periods of heavy traffic the shortest routes between important terminals can handle only a comparatively small part of the total business; and the bulk of the business must be allowed to overflow into longer and longer routes until all routes may be filled up.

Now, that is practically what already has occurred, and while a considerable gain may be made by rerouting traffic it would be easy to exaggerate, and many are exaggerating, the increase in efficiency which will or can be obtained by this means.

It probably is still true, as it has been in the past, that the most sure and feasible means of increasing the efficiency with which facilities are utilized is to load and unload cars as promptly as practicable, and to load both cars and locomotives as nearly as practicable to their maximum capacity. Doubtless more can be done along this line, but those who have closely followed the tremendous efforts which have been made year by year, and especially during the last two years, to increase the amount of traffic handled with each car and locomotive are likely to conclude that it is going to be a very difficult matter to so operate existing facilities as to cause them to handle any considerably larger amount of traffic in the near future.

The facts appear to be that, as a result of developments during the last dozen years, and especially within recent years, the growth of the country's transportation capacity has been much less than the growth of its productive capacity, and that there is no real remedy for the conditions resulting except an increase of transportation facilities.

What are the prospects of an early increase

of facilities? Let us survey especially the situation with respect to freight cars. Cars, like most other things wear out, and the statistics bearing on this matter indicate that in order merely to prevent an actual reduction in the number of really useful cars in service it is necessary to build at least 125,000 cars a year. To secure adequate increase in the number of cars there ought to be built at least 175,000 cars annually. The number built in 1917 was 119,000. Consequently, there are just about as many cars in service now as there were last year. Under normal conditions our car-building plants could perhaps turn out upwards of 250,000 or 300,000 cars in a year, but practically their capacity is limited at present by their ability to get materials and labor, especially materials.

As I already have said, we have a large car shortage at present. The crucial period in every years' railroad operation comes in the fall and winter. Will there be, before that critical period comes this year, any considerable increase in the number of cars available? Since January 1 only 5000 cars have been ordered, and they have been ordered to be built in the shops of one of the railways which has not yet financed the undertaking.

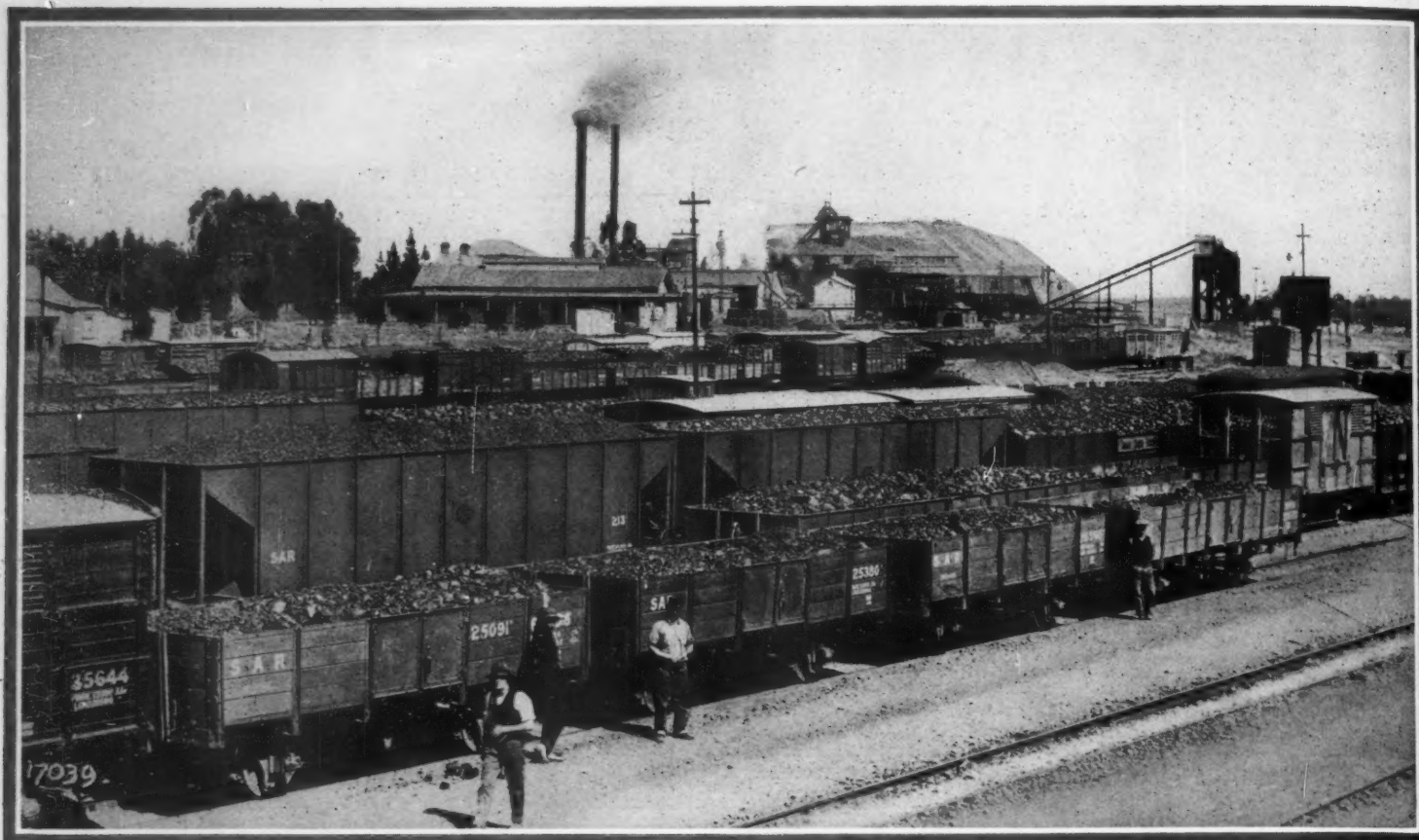
The car builders have been working thus far this year on orders both foreign and domestic received last year. Practically all these orders will soon be filled. The total cars built under them for domestic use this year may amount to 25,000. The Railroad Administration, as you know, is preparing to place an order for 100,000 cars. The material situation is such that if this entire order were placed to-day it would be practically impossible for the builders to begin to turn out the new cars before August 1. It would take them three months to procure their materials and get to work. They would then have six months of the year left.

Transportation Crisis Looms Big

IT has been estimated to me by a very high authority that it is highly improbable that all the car builders can build more than 8000 or 10,000 cars a month. It would appear then that if they should be given the order for 100,000 cars now they could hardly build more than 50,000 or 60,000 of them before January 1. This would make the total year's output of cars for domestic use 75,000 to 85,000, as compared with the minimum of 125,000 which it is necessary to build merely to maintain the existing supply of equipment.

It would appear, therefore, that there is likely to be during this year, as there was in 1915 and 1916, an actual reduction of the number of freight cars in service. Furthermore, not more than 30,000 to 40,000 of the new cars the Railroad Administration is planning to order can possibly be built in time to be available for service when the crisis in the transportation situation comes in the late fall and early winter.

Very soon after Government control was adopted it was forcibly and repeatedly pointed out by persons familiar with conditions and with the normal course of events, in the



Ships cannot move without coal, and coal has to be on hand at the wharf in all the distant corners of the globe. These big steel gondolas—made in America—are being hauled from the mines at Witbank, South Africa, to Capetown. It will be noticed that the “bogies”—as the British call the American cars—are loaded to the last lump that will stick on.

transportation and the railway materials fields that it was extremely desirable for orders for locomotives and cars to be placed early.

If at the start the Railroad Administration had authorized the individual railways to purchase their normal requirements of locomotives and cars in the usual way, giving them the backing of the Government's credit, the prospect of an increase instead of a decline in the amount of available equipment during the year would be much brighter. The builder before he can begin to build must assemble his material and get his labor, and before he can do these things he must know how many cars or locomotives he is expected to build. These things take time, and never did they take so much time as at present.

Whether the Railroad Administration will in the long run save any money to the public by taking precious time to consider such questions as locomotive standardization and the relinquishment by manufacturers and inventors of their patent and royalty rights, is doubtful, but that by doing so it is causing a slowing down rather than a speeding up of the transportation machine when speeding up is most necessary seems certain.

A Revolution in Transportation

WHAT I have said about present and prospective conditions with respect to car supply is not adapted to cause optimism regarding the transportation situation which is going to exist the rest of this year and in the early part of next year. It has not been intended to inspire optimism, but to present the facts. The two outstanding points with regard to the transportation situation seem to be that, first, the available freight traffic of the country is vastly larger than the railways can handle with present facilities and that, second, we can-

not reasonably hope that under present conditions and with present methods the facilities will be materially increased for many months.

In these circumstances it is necessary to do two things; first, for the railways and the shipping public to cooperate as closely and vigorously as they can to secure the best possible utilization of existing locomotives, cars and other facilities, and second, for the Railroad Administration, by vigorous use of embargoes and other methods, to give preference to traffic essential to carrying on the war and to providing the public with commodities required for its subsistence and comfort. This will involve continuance of the denial of transportation to a large part of the non-essential businesses. The nation, by a narrow, unwise, and unfair policy of railway regulation prevented needed increases of railway facilities when they could have been made. It refused to listen to loud and repeated warnings as to the inevitable consequences. It must now in this terrible crisis pay the penalty for the injustices it has committed and the shortsightedness with which it has acted.

Now that the nation is paying the price of the policy of regulation it has followed, many persons who have a large and grave responsibility for having influenced the public to follow this policy are complaining that the railways have “broken down” and attempting to put the entire blame for the alleged breakdown upon their owners and managers.

It is difficult to believe that the American people will follow them farther. So long as the development of our railways under private ownership received encouragement instead of discouragement the expansion of railway facilities went on faster in this country than in any other in the world. In 1913 the freight cars of our railways had six times as much

carrying capacity in proportion to our population as those of the railways of Germany, and they actually handled five times as much freight traffic in proportion to our population as did those of Germany,—and the railways of Germany have relatively the greatest freight carrying capacity of any government-owned railways in the world.

Locking the Door on the New Horse

During the war we can do little to repair the harm our restrictive and repressive policy of regulation had done before the war. We can, however, inform ourselves of and disseminate the facts which demonstrate that private management is more conducive than government management to efficient operation and adequate development of railway facilities. We can insist that Government control shall be used solely as a war measure, and not so as to make a return of the railways to private management almost impossible, we can apply ourselves to formulating a policy of private ownership and public regulation, which, if adopted after the war will cause the needed revival of the expansion of railway facilities; and we can devote some of our time to educating the public opinion of the country so that after the war there will be a reasonable chance to get a sane and constructive policy adopted.

Surely our transportation experience in the year before we entered the war, and in the year since we entered it, has taught us a lesson which we shall not forget after the war. This great body, representing all the large and important business interests of America, is ideally situated and ideally fitted to so educate and lead public opinion that the transportation conditions which now so greatly trouble us will be remedied, and that their recurrence will be forever prevented.

FLOATING THE NATION'S DEBT

We Pay, Not in Coin, but
With Our Word; and
That Word Is Our Bond

By DAVID R. FORGAN

President, National City Bank, Chicago

WHEN this war was started financiers were generally of the opinion that it could not be waged on the modern scale for more than six months, or possibly a year. But here we are, in the fourth year of the war, and there seems to be no sign of its coming to an end from financial exhaustion.

The question naturally arises—Where does all of the money come from to be lent in such enormous sums to the various governments engaged in the war? An answer to this question puzzles many minds. The answer, however, is simple enough. The money does not come from anywhere. It is not a money transaction. It is a credit transaction.

Unfortunately, the terms of credit are stated and measured by terms of money. We bankers constantly speak of lending money to our customers, whereas we really lend them the bank's credit. For example: When a customer's note for \$1000 is discounted by a bank, and the proceeds placed to the customer's credit, that bank's loans and that bank's deposits are immediately increased by \$1000, but there is not a dollar more or less money in the bank than before the customer offered his note. The bank, without the use of any money whatever, has created a credit of \$1000, which serves the purpose of money to the borrower.

What the bank's customer does on a small scale, the Government is doing on an enormous scale. The bank customer's note is only a scrap of paper, but it represents the property, the character and the honor of the maker. A Government bond costs only the engraver's bill to produce, but it stands for all the taxable property, the character and the honor of the American people. But there will be neither more nor less money in the country after the present Government loan has been floated than there is to-day.

The modern credit system deals in a kind of element closely akin to water. That is why we talk of *liquid* assets or the *floating* of a loan. The modern credit system may, therefore, be likened to a sea on which there are already afloat many credit craft. All national debts, all international trade balances, all the stocks and bonds dealt in on all the stock exchanges of the world, all bank loans, all bank deposits, all paper money, all bills and accounts receivable or payable—all of these may be said to be vessels already afloat on this sea of credit. The question, therefore, is not, where does the money come from, but is there still room in this sea of credit for another vessel of tremendous proportions? If there is, it may be safely floated.

Now the credit system is in the hands of the bankers,—public and private. Just as production is in the hands of the farmer, the miner and the manufacturer—just as transportation is in the hands of the railroad man, so credit is in the control of the banker. In war time this is a heavy responsibility. As a whole, bankers—chartered and private—have so far stood the test splendidly. And whereas

the farmer and manufacturer are being allowed at least double their normal profits for anything they do for the Government, the bankers have given their time, their organizations and their best efforts to providing the Government with credit, not only without any remuneration, but at considerable expense and loss. While this is unfair, and quite at variance with the practice of our allies, it is all the more honor to American bankers.

But with or without remuneration it is the duty of all banks and bankers to devote their resources, and bend their energies to the utmost in floating these enormous Government loans. And this must be done without undue restriction of credit to their ordinary customers, so that general business may be active and profitable as a basis for the sound financial conditions which must prevail if the war is to be won.

What is needed is the most extensive co-operation between the public and the banks. The banks cannot do it alone. The public, aided by the banks, must take the greater part of the bonds. If they do not, the banks will be compelled to take them. But should that happen, commercial credit would have to be so curtailed that the public would suffer greater inconvenience and much greater loss than if they took the bonds in cooperation with the banks. The undertaking is a mutual one. To the extent that the banker induces his customer to buy the bonds, the banks will be relieved from taking them, and to the same extent will they be able to continue commercial credits to their borrowing customers.

In accomplishing the big tasks which lie before them, banks will be forced to great expansion,—inflation, if you like—of credit. With costs doubled, business cannot be maintained and the Government supplied with additional billions without great expansion of credit. In a word, the war will be lost, and all will be lost, unless we find the means for

tremendous expansion and are willing to use them. These means, thank God (I say it reverently), are ready at hand. The Federal Reserve system, set going since the war broke out, provides ample means. Can any banker imagine where we would now be without the Federal Reserve banks? Can any one imagine floating a five- or six-billion Liberty Loan on a suspended banking system? Then let us not only thank God for the means,—but let us not be afraid to use them. One of the hardest-dying prejudices among bankers is that against showing re-discounts or bills payable. It is dying in the centers, but still very much alive in the country towns. It must be overcome if the country banker is to do his full share in support of the Government. Instead of a subject for criticism, it should be a badge of honor to show re-discounts, or bills payable, in connection with the floating of Liberty Loans.

The Future of the Bonds

ON the other hand the question which every loyal American business man must ask himself is not—"Have I, or has my firm or my corporation any money to spare for Government bonds?" Few business men have much idle money. The question is, "How far can I use my individual credit and the credit of my business with my bank in the purchase of Government bonds?" If he carries his share for some time he may lose some difference in interest—a small sacrifice for patriotism—but if he will carry them long enough even that loss will be regained by the premium the bonds are sure to command after the war is over.

It is going to be hard to keep at par such quantities of bonds as are being issued. Business men may choose to take the loss of the market discount which will never be severe by selling their share of each issue, and thus being ready for the next. I know that such a course has been condemned in some quarters but I think unwarrantably. The final resting place for Government bonds is in the strong box of the investor. The funds of life and fire insurance companies, of educational, charitable and benevolent institutions, of rich estates and of retired business men, and that part of the increment derived from former investments which the holders do not spend—these are the final absorbers of Government bonds.

When a loan is floated by the Government, it gets the money and its need is met. Now if an active business man chooses to sell his bonds at a loss to some of the final absorbers above noted, and thus be ready to take his proper share of the next loan, I think he should be commended,—not criticised. This does not apply to the small saver-investor, but the same principle holds good with commercial banks, whose funds should not be tied up permanently in Government bonds because they are needed to carry on business undertakings whose production the war demands.

It is as important for the war that Chicago banks continue loans (Concluded on page 82)



Building Fighting Spirit—and Ships

Efficiency Increases as Shipyard Workers, Catching Full Significance of Their Jobs, Stiffen Their Resolve to Construct that Bridge of Boats to Europe

By CRAWFORD VAUGHN

Formerly Premier of Australia

FOR God's sake, hurry up." Those dying words of Joseph H. Choate must be our slogan, but they must be interpreted by practical men and in a practical way. Thoroughness must accompany hustle, and sober efficiency must not be replaced by intemperate haste. The motto of victory for us is what it was for Cromwell: "Trust God and keep your powder dry." We must, in short, know our problem and attack it with full understanding and with reasoned enthusiasm.

At the same time, never let us forget that help at hand is worth everything; help an hour too late is worse than useless. "A little more and how much it is; a little less and how far away." Procrastination involves the death of brave men; delay in sending reinforcements means the overthrow of liberty.

What are we doing to speed up those reinforcements? The soldiers of America are here waiting, thousands of them, equipped to the last lacehole in the last puttee, ready to go over the top in a charge that will sweep everything before them. It's up to us to get them over there, where alone they can give America's answer to German frightfulness.

Ships are the bridge to victory. Germany's ruthless submarine campaign shows that she fully realizes that fact. Her efforts are directed in three main channels:—In breaking the line on the Western front before America can strike in force; in cutting the lines of communication by sinking ships and burning shipyards; in seeking to undermine the morale of the Allied nations at home by pacifist pro-German and I. W. W. propaganda.

Germany has made a careful tabulation of the serious shipping problem that faces the Allies. Appreciating the fact that the Allied armies and the Allied nations must be fed, clothed and maintained from abroad, she has sought, not unsuccessfully, to cut the pontoon bridge by sinking a greater tonnage than the Allies are building, thus widening the gap which must be spanned, if adequate supplies and reinforcements are to be sent to Europe.

Last year she sank 6,000,000 tons of neutral and Allied shipping against 3,000,000 tons built. From the outset of the war, Germany has seen the Allies' and neutrals' shipping reduced from 42,574,537 tons to 39,516,266 tons, an actual reduction of 3,058,271 tons, after allowance has been made for German and Austrian interned ships seized. In other words, while the Allies and neutrals have built or seized 9,195,275 tons of ships since August, 1914, they have lost 12,253,546 tons. Necessarily war needs have called for a greater tonnage than the world ever required in its history, and as 1,500,000 of the flower of American manhood are to be sent to the firing line, an additional 4,500,000 tons of ships at least are urgently needed, bringing the world's immediate shortage up to 7,500,000 tons. To this total must be added the submarine sinkings which, if reduced in 1918

to one-half of the loss of 1917, will make the call for new ships this year amount to not less than 10,558,271 tons.

War needs are, of course, to have priority. To the extent to which war needs cut into the available tonnage, to that extent the export trade must suffer. To the extent to which the export trade suffers, to that extent production of export goods must be curtailed. Obviously no nation can continue to pile goods on the wharves waiting for ships that never come.

Ships, therefore, are first vital to victory; second, vital to employment; third, vital to business. Without victory, of course, all else is as a dead sea apple—ashes to the taste—but even with victory it is well that we should keep industries dependent upon an export trade intact. Lasting peace will bring its own grave problems; let us not add to these problems by having destroyed our export trade, as must be done unless there are ships sufficient to maintain it. There is not then a person in this wide country whose first, second, third and last interest, nationally and individually, is not indissolubly bound up in speeding up shipbuilding.

Ship production in the United States increased from 215,000 gross tons in 1915 to 559,000 tons in 1916 and to 1,034,000 in 1917. If the output of 1918 amounts to 3,000,000 gross tons, America will have done well. That will be equal to 15 times the production of 1915. The labor in American shipyards has increased from 106,897 men in October last to 236,915 on March 2, last. But we have to measure ship production not by comparison with other years but with the world's needs, for America is the one great country in the world from which added tonnage can be expected.

The task to which the organization over which Dr. Charles Eaton presides has devoted itself is to get full efficiency out of the added labor power as well as out of

existing facilities. To augment the number of shipyards without adding to the amount of skilled labor available is to spread that labor out thinner than the safety mark allows. The inefficient worker in the yards is like an additional man in the boat who instead of pulling has to be pulled. At present it may be taken as an optimistic estimate that we are getting 75 per cent efficiency out of shipyards, as compared with ordinary industries. If means can be devised for securing 100 per cent efficiency, it will be equal to adding at least 50,000 additional skilled workers to the yards.

It is becoming increasingly fashionable to attribute the lack of efficiency in shipyards to lack of patriotism on the part of the employees. That charge is as true as the celebrated description of the crab as a red fish which swims backwards and which the French savant declared was perfectly correct excepting that a crab was not a fish, was not red, and did not swim backwards.

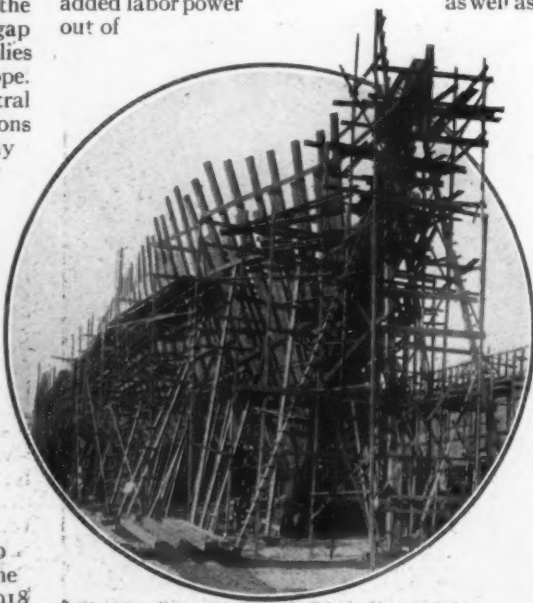
What Will Increase Production

SHIPYARD workers do not differ materially from other American workers. They are just as loyal, just as devoted to the cause of liberty, just as responsive to an appeal to their patriotism as is any other section of American citizens. If they have not fully realized the relation of their labor to the winning of the war, do they differ materially from the rest of us; and is their deficiency, if it exists, their own fault? Their morale—their fighting spirit—must be built up just as must be the morale of the nation at large. Give them the message and they will apply the understanding.

Dr. Eaton and his helpers have gone into the shipyards of this country in order to put the message across. Surely no more important work could be done at this hour. Time is required to add to existing plants, but time is not required to add to the efficiency of existing plants.

I have seen the growth amongst the men of a wonderful spirit of patriotism expressing itself in deeds rather than in words. They are realizing that every American shipyard is a fortress of freedom, that every ship launched is a lifeboat of liberty, that every rivet driven is a nail in the Kaiser's coffin, and that if they, the shipworkers, will build the boats, there are brave men who will man them and other brave men who will take America's message across to France on them. They appreciate the fact that any shipyard worker who lays down his tools when he could be working is like the soldier on guard who lays down his rifle and lets the enemy through the line.

The practical result of this propaganda is to be seen in the labor turnover, which has been materially reduced. Here are some figures of different yards:—660% in January to 276% in February; 204 to 153; 177 to 163; 346 to 234, in spite of a strike; 162 to 35; 255 to 187, and so on. Only in a few cases has the turnover increased. Some of this improvement is due to (Continued on page 86)



Business Assays High in War's Test

And So Its Voice Will Be Heeded in the Day of Tremendous Readjustment Because of the Part It Plays Now

By WADDILL CATCHINGS

Chairman, War Service Executive Committee Chamber of Commerce of the United States

THE purpose of the war organization of business is to make use of experienced business men. The war brings to the government great industrial problems which must be solved; it brings to business problems which must be solved if industry is not to be prostrated in the early stages of the war. For the solution of these problems there is required the best that the trained business man can give. Winning the war hangs upon that solution. Thus a heavy responsibility rests on the business man.

There have been called to the colors those men who in the past have acquired military training. These especially equipped men are needed by the nation for the purpose for which they were trained. The skilled machinist likewise has a definite national duty. He is needed for the production of ships, of cannon and munitions of war. In the same manner the man of training in industry carries in these times the responsibility of bringing about the output which is needed to give our soldiers at the front the full support of American industry.

Business success is based upon knowledge and experience. If the great industrial problems of the war are solved, this will be business success. Such business success is likewise dependent upon knowledge and experience.

Recognizing this responsibility and duty, business men in all lines of industry are organizing. They have formed, in more than 150 industries, war service committees to make available the best men there are in industry. In the past, many of the most important business men have taken no active interest in business organization. They have been absorbed in their own problems; but in view of the war duty and responsibility upon business men, they have come forward and are taking their part. The war service committees are making available for public service the best men of the industries.

It is not enough, however, for business men to be ready to render service through these committees and otherwise—they must make themselves available for public service. To accomplish this it is necessary to remove any suspicion of self-seeking. They must demonstrate that they are prepared to serve, not in their own interest, but in the interest of all. They must serve without a profit interest in their service. That is to say,

they must have no profit interest in the war. Profit must be no more than is normally needed to secure the smooth operation of business.

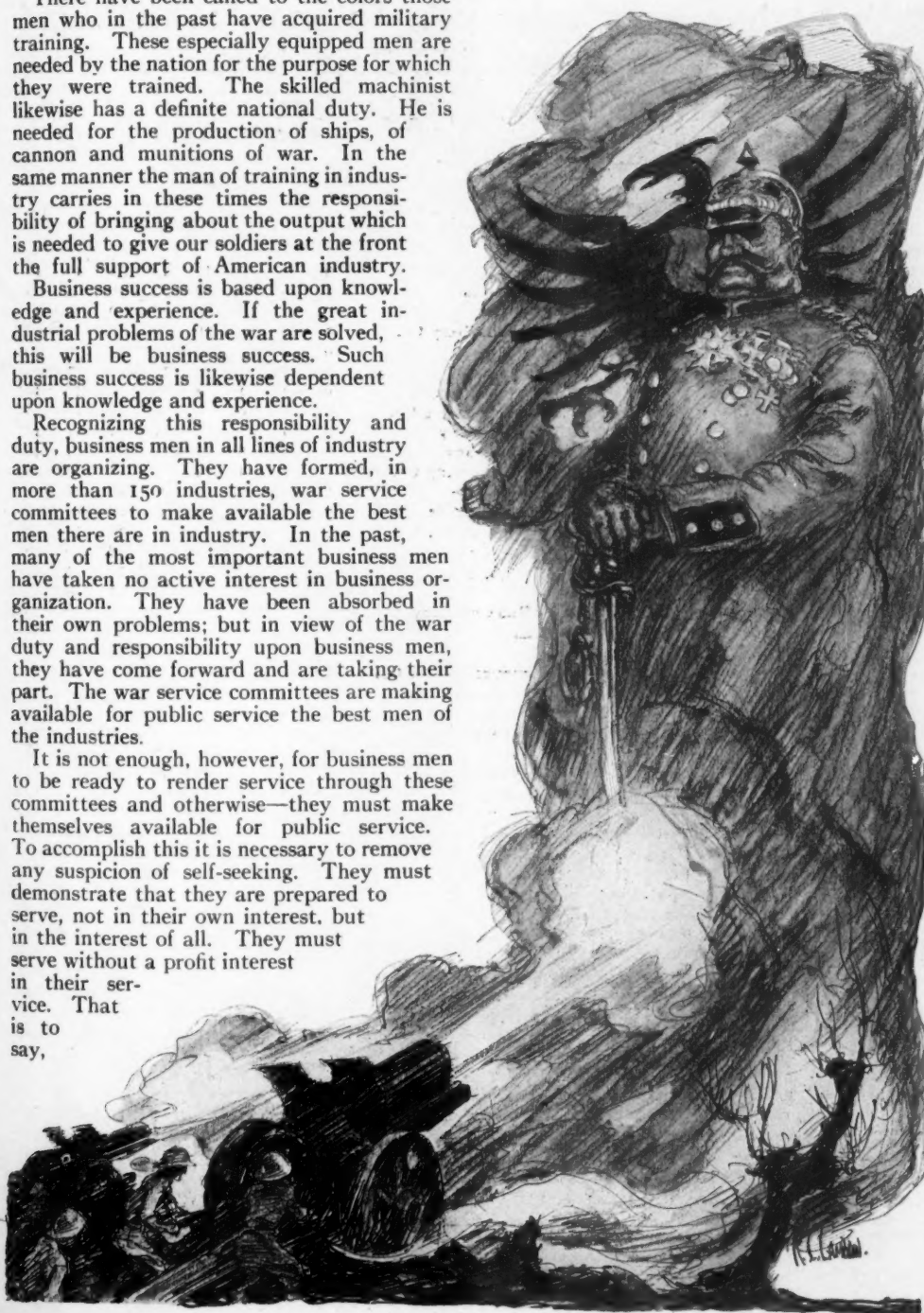
The Chamber of Commerce of the United States on three occasions has recorded an overwhelming vote of business men throughout the country that there should be no profit interest in the war. This, however, is not enough. Business men must assist in putting these

views into effect. They must formulate and develop a programme in connection with the laws of supply and demand, in connection with the need for stimulating prices, which will bring about full production that will avoid a profit interest in war. It is probable that no such programme can be formulated except in accord with excess profit taxation. Whatever may be the form, it is essential that business men, to become available for war service, must actually shape a condition where there is no profit interest on their part in the war. In this all are interested in what is done by one. If some business men take advantage of this national emergency to make large profits, reflection is cast upon all, and it becomes increasingly difficult for business men to demonstrate their availability for public service.

Facing conditions as they actually exist, we must recognize that business men have not been available for highest positions. They have been distrusted—in many cases they have been regarded inevitably as profit seekers. Definite concerted effort must be made by business men to remove this distrust at this time. We are every one of us interested in seeing that the soldiers at the front get the best support behind the lines, that they get all the supplies of munitions and equipment which they require. This can be done only if experienced business men are used to the fullest extent, and this cannot be unless business men, acting together, make themselves available for this public service.

Business men must do constructive work. They must study conditions as they are, the problems which are presented for solution, and make definite suggestions based upon their knowledge and experience, for the solution of these problems. To this end is needed a full opportunity for business men to express their views with regard to the basis upon which the government can formulate a price plan, upon which output can be distributed, and the manner in which there shall be determined essential and non-essential industry.

Business men must likewise apply themselves to the problems which will arise after the war, problems of re-creating the normal structure of business, the problems which will be presented to vast industries when there is no longer the war demand for their output, the great problems of the return to industry of the millions of men from the army. Already the British have undertaken elaborate work in this connection. There has been formed, as part of the government, a Ministry of Reconstruction, which has no less than 87 committees and commissions at work studying various phases of reconstruction problems. Eight committees are studying different aspects of the problem of demobilization and the disposal of stores, six committees are studying problems in connection with raw materials, two in connection with finance, and so on. There are committees studying such questions as trade relations after the war, coal conservation and the development of power facilities. Besides these, there are special committees in the chemical trades. (Concluded on page 82)





Roll

of White Truck Fleets In

THIS Annual Broadside of White Truck fleet owners represents the very pick of American industry and commerce. It is a list of installations of ten trucks or more, showing how they grow from year to year, as time and service show their worth. There are now 2,153 fleets in active service, totaling 23,226 White Trucks, exclusive of all single truck installations.

	1910	1911	1912	1913	1914	1915	To- 1916 day
Abraham & Straus	0	0	0	0	0	0	10
Adams Express Company	0	0	0	2	3	5	10
B. Altman & Company	0	0	8	8	33	67	92
Aluminum Co. of America	0	0	0	0	1	2	16
American Ambulance Field Service	0	0	0	0	0	0	1
American Can Company	0	0	4	7	8	8	33
American Express Company	0	0	0	7	8	8	44
American Petroleum Company	0	0	0	0	0	0	12
American Red Cross Society	0	0	0	0	0	0	86
American Steel and Wire Company	0	0	1	5	5	6	10
American Stores Company	0	1	2	9	14	14	29
Amer. War Relief Clearing House	0	0	0	0	0	2	18
Ammen Transportation Company	0	0	2	7	8	9	11
Anheuser-Busch Brewing Ass'n	0	0	0	0	0	1	17
Arlington Mills	0	1	1	1	1	2	11
Armour & Company	0	4	30	51	63	84	165
Associated Bell Telephone Cos.	0	1	6	30	46	84	311
Associated Dry Goods Corporation	0	0	8	13	23	29	37
City of Atlanta	0	3	6	8	10	10	11
Atlantic Ice & Coal Corporation	0	0	0	15	15	15	20
Atlantic Refining Company	1	4	9	31	67	86	184
Auto Livery Company	0	0	0	0	0	0	15
The Bailey Company	0	1	3	6	6	13	16
City of Baltimore	0	3	4	7	14	14	29
Baltimore Transit Company	0	0	0	0	0	1	1
The Barrett Company	0	0	0	0	0	0	11
Beam-Fletcher Corporation	0	0	0	0	0	0	16
Bellevue & Allied Hospitals	0	0	0	1	3	9	15
Stedman Bent	0	0	0	0	0	1	19
William Bingham Company	0	0	0	0	0	0	16
Samuel Bingham's Sons Mfg. Co.	0	0	2	3	4	4	6
Blake Motor Trucking Company	0	0	0	1	6	6	18
Boggs & Buhl, Inc.	0	8	10	18	23	24	24
Henry Bosch Company	2	8	8	9	10	10	11
City of Boston	0	2	9	12	17	18	19
Bradford Baking Company	0	0	0	9	20	25	26
The Brandt Company	0	0	0	0	0	0	1
Broadway Taxicab Company	0	3	12	12	12	12	12
Brooklyn Alcatraz Asphalt Co.	0	0	0	2	9	9	11
P. H. Butler Company	0	0	0	1	1	4	6
H. M. Bylesby & Co., Inc.	0	1	2	2	2	3	5
California Baking Company	0	0	0	0	0	0	15
Chapin-Sacks Manufacturing Co.	0	0	0	0	0	0	10
Chero-Cola Bottling Companies	0	0	0	0	4	6	30
City of Chicago	0	0	0	1	4	10	27

	1910	1911	1912	1913	1914	1915	To- 1916 day
Chicago Fire Insurance Board	0	0	5	11	13	13	13
Cities Service Co. Interests	0	0	0	0	0	0	3
Clark's Bus Line	0	0	0	0	0	0	0
Clearing House Parcel Delivery Co.	0	0	0	0	0	3	10
City of Cleveland	0	2	7	14	15	19	23
Cleveland-Akron Bag Company	6	7	9	14	15	19	21
Cleveland Builders Supply Co.	0	1	1	3	4	7	10
Cleveland Electric Illuminating Co.	0	0	0	0	0	6	17
Cleveland Provision Company	0	1	2	3	7	7	11
Cleveland Transfer Company	0	0	0	0	0	0	1
Cleveland & Sandusky Brewing Co.	0	0	1	1	2	3	10
Club Cab Corporation	0	0	0	0	0	21	25
Coca-Cola Bottling Companies	0	3	6	12	26	38	75
Consol. Gas, El. Light & Power Co.	2	3	6	8	11	12	12
Continental Oil Company	0	1	2	2	3	4	19
Cudahy Packing Company	0	0	2	6	8	10	21
James DeMallie	0	0	0	0	1	1	16
Des Moines Motor Bus Company	0	0	0	0	0	0	23
Dominion of Canada	0	0	0	0	47	47	47
Dunn & Roth	0	0	0	0	0	0	24
E. I. DuPont de Nemours Powder Co.	0	0	0	0	0	0	1
East Ohio Gas Company	0	0	0	1	3	5	5
T. Eaton Company, Ltd.	0	5	13	14	15	15	20
Emerick Motor Bus Company	0	0	0	1	5	9	11
Empire Gas & Fuel Co.	0	0	0	0	0	0	33
Owen H. Fay Livery Company	0	0	0	23	23	23	24
Fenway Garage Company	0	0	19	19	29	29	39
Fly & Hobson Company	0	0	0	0	0	0	0
Foster & Kleiser, Inc.	0	2	4	4	8	10	10
Harry V. Franks	0	0	0	0	0	0	6
Frederick & Nelson, Inc.	0	0	0	3	7	9	10
A. W. Gamage, Ltd.	0	0	14	14	14	14	14
General Baking Company	0	0	0	1	1	1	1
Georgia Railway & Power Co.	0	0	1	3	7	7	18
Gilman Motor Trucking Co.	0	0	0	0	0	0	0
Gimbel Brothers	0	20	26	46	59	59	62
Glacier Park Transportation Co.	0	0	0	0	10	20	22
Stacy G. Glauser & Son	0	0	0	0	0	2	4
Adolf Gobel	0	0	0	0	0	0	10
J. Goldsmith & Sons Company	0	0	3	4	5	5	7
B. F. Goodrich Company	4	6	9	11	12	17	19
Goodyear Tire & Rubber Co.	0	0	0	0	0	0	3
Great Northern Paper Company	0	0	0	1	1	11	13
Greenfield Elec. Light & Power Co.	0	3	6	9	10	11	13
Gulf Refining Company	0	1	9	29	81	172	463

Call

s In Actual Service



	1910	1911	1912	1913	1914	1915	To- 1916 day
Halle Brothers Company	0	0	0	0	0	0	12 13
Haverty Furniture Company	0	0	0	0	2	6	7 12
Hawaii County, T. H.	0	0	2	9	9	9	10 11
H. J. Heinz Company	0	0	0	0	0	0	16 19
The Higbee Company	2	4	5	6	10	10	10 12
Joseph Horne Company	5	12	15	24	33	39	47 47
J. L. Hudson Company	0	0	0	0	0	10	17 20
Imperial Oil Company, Ltd.	0	1	1	1	1	1	12 42
Independent Brewing Co. of Pittsburgh	1	1	2	5	5	11	28 36
Jones Store Company	0	2	2	5	6	10	14 17
Kaufmann Dept. Stores, Inc.	0	0	10	16	24	44	80 80
Kaufmann & Baer Company	0	0	0	1	40	45	51 59
C. D. Kenny Company	0	0	0	0	0	0	12 36
Henry Knight & Son	0	0	0	0	0	0	0 10
Theodor Kundtz Company	3	7	8	9	10	11	12 13
J. William Lee & Son	0	0	0	0	0	0	13 13
Fred T. Ley & Company	0	0	0	0	1	1	4 10
Leyte Land Transportation Co.	0	0	3	6	10	12	14 14
Lit Brothers	0	0	0	0	0	0	17 26
Los Angeles Brewing Company	0	0	2	7	13	14	15 17
Los Angeles Ice & Cold Storage Co.	0	0	0	0	0	0	5 10
Henry C. Lytton & Sons (The Hub)	0	6	7	9	10	11	11 12
McCreery & Company	6	6	8	8	8	11	15 15
G. M. McKelvey Company	0	0	1	1	6	8	18 18
R. H. Macy & Company	0	0	0	0	0	0	15 15
Mandel Brothers	0	9	10	15	16	17	17 17
A. C. Marshall Company	0	0	0	0	0	0	0 15
State of Massachusetts	0	1	4	4	4	5	11 11
The May Company	0	0	0	4	11	15	26 26
Mesaba Transportation Company	0	0	0	0	0	2	15 18
Miami Valley Fruit Co.	0	0	0	0	0	0	0 12
Michelin Tire Company	0	1	2	3	3	9	11 11
National Casket Company	0	0	2	10	14	15	19 21
Province of New Brunswick	0	0	0	0	0	0	20 20
State of New York	0	0	3	3	3	5	29 37
City of New York	0	1	7	11	12	13	13 13
N. Y. Board of Fire Underwriters	0	0	2	6	8	16	20 20
Omaha Taxicab Company	0	0	0	0	6	8	17 17
Onondaga County, N. Y.	0	0	0	0	1	3	5 10
Oppenheim, Collins & Company	0	0	0	0	20	21	27 27
Pacific Mills	0	0	3	4	4	7	12 14
Frank Parmelee Company	0	0	0	9	9	18	28 28
Peninsula Rapid Transit Co.	0	0	0	0	0	7	8 15
State of Pennsylvania	0	0	0	0	1	2	5 15
Philadelphia Electric Company	0	0	0	0	0	0	13 15
City of Pittsburgh	0	2	9	14	14	15	15 15
Prest-o-lite Company	1	1	1	1	2	4	11 13
Pullman Taxicab Company	0	0	0	0	10	10	31 31
Quaker City Cab Company	0	0	0	0	0	0	75 100
Edward E. Reick Company	0	0	0	0	0	0	2 16
Riverside Oil Company	0	0	0	0	0	0	0 16
Riverside Taxi Service Company	0	0	0	0	5	15	15 15
Rocky Mountain Motors Co.	0	0	2	2	3	3	21 23
The Rosenbaum Company	1	1	2	11	12	33	39 43
City of St. Louis	0	0	0	0	4	6	9 10
Saks & Company	0	0	0	0	10	10	10 10
San Bernardino Mountain Auto Line	0	1	3	4	6	6	9 14
San Francisco Drayage Company	0	0	0	0	1	3	11 12
San Francisco Municipal Ry.	0	0	0	0	0	0	0 10
Schmidt & Ziegler, Ltd.	0	0	0	0	0	0	0 11

	1910	1911	1912	1913	1914	1915	To- 1916 day
Schulze Baking Company	1	1	9	15	17	22	23 26
Seiple & Wolf	0	0	0	1	2	2	10 10
Franklin Simon & Company	0	0	0	3	6	10	14 14
W. & J. Sloane	13	14	15	15	15	17	21 23
Southern Express Company	0	0	0	2	9	11	31 41
Spear & Company	0	0	1	9	13	14	15 22
Standard Oil Co. of California	1	3	4	6	7	26	67 97
Standard Oil Co. of Indiana	1	4	5	9	59	122	168 201
Standard Oil Co. of Kentucky	0	1	2	4	5	9	38 75
Standard Oil Co. of Nebraska	0	0	0	0	5	11	17 17
Standard Oil Co. of New Jersey	0	0	1	1	1	1	3 30
Standard Oil Co. of New York	2	6	18	35	68	113	230 363
Standard Oil Co. of Ohio	0	1	1	1	10	17	28 36
Stark-Tuscarawas Brewing Co.	0	0	0	1	1	2	7 12
Sterling & Welch Company	2	4	7	7	8	8	11 14
Stern Brothers	0	0	8	18	18	19	21 22
Stewart Taxi Service Company	0	0	0	0	0	0	18 30
Strawbridge & Clothier	0	0	0	2	4	4	9 15
Stroehman Baking Company	0	0	0	2	2	2	10 10
Swift & Company	0	0	0	2	2	10	101 109
Taxicab Association, Inc.	0	0	0	26	40	76	151 151
Taxicab Company of California	0	0	19	39	59	59	59 69
Telling-Belle Vernon Company	0	3	4	4	9	11	11 13
E. B. Tenny	0	0	0	1	3	6	12 12
Terminal Taxicab Company	0	0	20	36	61	61	61 90
Arthur Tufts	0	0	0	0	0	0	0 15
Union Oil Company of California	0	0	0	1	10	22	43 156
Union Transfer Company	0	0	0	0	0	0	1 11
United Gas Improvement Co.	0	0	0	0	2	3	25 31
United Gas Imp't Co. Interests	0	0	0	2	6	12	16 34
United States Baking Co.	0	0	0	0	1	2	2 11
U. S. Post Office Department	0	0	0	21	27	104	132 298
U. S. Steel Corporation Interests	0	0	1	1	2	3	5 12
F. G. Vogt & Sons, Inc.	0	0	0	1	2	3	5 12
Wall Street Taxicab Company	0	0	0	0	0	0	14 19
John Wanamaker	0	0	0	0	0	6	27 37
Ward Baking Company	0	0	0	0	0	12	53 76
Raphael Weill & Company	0	0	0	0	0	10	10 15
Westcott Express Company	0	0	0	0	0	0	0 36
Western Electric Company	0	0	2	4	5	5	9 15
Western Meat Company	0	0	0	0	0	0	2 11
R. H. White Company	0	0	0	0	0	1	4 14
J. G. White & Co., Inc., Interests	0	1	1	1	1	1	4 16
White Bus Line Company	0	0	0	0	0	0	5 14
White Taxicab Company	0	0	0	0	0	0	2 11
White Transit Company	0	1	1	2	6	9	19 29
State of Wisconsin	0	0	0	0	0	0	15 15
Woodward & Lothrop, Inc.	0	1	1	3	3	4	7 13
Yellowstone Park Transport. Co.	0	0	0	0	0	0	106 112
Yosemite National Park Co.	0	0	0	1	7	7	25 27
Zumstein Taxicab Company	0	0	0	2	2	6	10 20

54 191 508 1021 1747 2594 5114 7343

THE WHITE COMPANY
Cleveland

When This Nation We Can, We Must, and We Shall Have Them; But the Impetus Must Come From the People, and the Direction From Business Men

By EDWARD A. FILENE

Chairman, War Shipping Committee, Chamber of Commerce of the United States

THE most urgent problem before American business men to-day is this: What can business men do through their organizations, to help get ships enough to insure victory—and to get them in time?

Business men are not concerned primarily in making a theoretical analysis of what government agencies have done, left undone, might have done, or should do. Their chief concern is to tap some *new* source of power to put behind the shipping problem.

In my judgment the American people are more responsible for delays in ship construction than is the Government. I have no desire to gloss over any responsibility for delay that may rest upon the Government. But it should be clearly understood that even though the Government does its work perfectly, so far as its administrative functions go, still there will be delays until the people in general, and we business men in particular, accept and discharge our full share of the responsibility for getting out ships.

We are a democracy. Democracies are not designed primarily as fighting machines. Even perfect administration at the top cannot always match with promptness the ruthless efficiency of the autocrat who moves his obedient people about as pawns on a chess-board. In a democracy, even the perfect work of the expert administrator depends for its final effectiveness upon the driving power of the national will back of it.

To put it more concretely—if the Government always made adequate appropriations, and made them far enough in advance; if the Government always planned far enough ahead, made plans that would not be constantly changed in a laudable, though often abortive, search for perfection; if the Government always kept insistently at an accepted plan until a new plan had been tested and proved better—tested on a small scale as a laboratory experiment that would not interfere with the work in hand; if all this were true, still delay would handicap and shortage disturb us unless the community and its business forces stood back of the work with a co-operative spirit, reduced to a well-thought-out plan insistently administered.

The Community's Part

THERE are enough men to talk about the blame for delay due to causes which the Government can correct. Let us emphasize the blame that rests upon communities and the business men of these communities, and try to find a way to help.

Nothing shows more clearly our social shortsightedness than the difference between the way we treat our soldiers and our shipworkers. Suppose we had assembled our soldiers, given them arms and ammunition, and ammunition, and stopped there. Suppose we had let every individual soldier scramble for a place to live. Suppose we had given little or no thought to the problem of locally transporting our soldiers and their supplies.

Suppose we had not given expert attention to the problem of sanitation where we massed our soldiers. Suppose we had never cheered our soldiers as they marched through the streets.

Of course we did not do that. We accepted without question the obligation to provide adequately for our soldiers. We did not stop at giving them guns and ammunition. We built all of the houses for them. We attended to the problems of transportation for them and their supplies. We gave expert attention to the sanitary conditions under which they are obliged to live. We even created organizations to look after the problem of their education and amusement.

Treat the Shipworker Right

BUT the military soldiers in their cantonments require no greater consideration at our hands than do our industrial soldiers in the shipyards. These enormous programmes of housing, sanitation, transportation, education and amusements—to say nothing of the cheers of an appreciative community—are, at this critical stage of the war, even more vital to the men in the shipyards.

Can we expect the maximum of speed and efficiency from shipworkers who, after a day of hard and grueling work, must stand in the rain waiting for delayed and inadequate transportation? Can we expect the maximum of speed and efficiency from shipworkers who must crowd into unsanitary and already overcrowded sleeping quarters?

Frequently, after waiting a long time in the rain, the ship-workers are obliged to pack themselves, wet and tired, like so many sardines in a car, or, worse still, pack themselves into trucks that carry them over bad roads into the city. Imagine these men passing a limousine that could carry seven workmen occupied only by a woman and her lap dog. Will that convince them that, as a nation, we mean what we say when we tell them that the very outcome of the war, the freedom of our nation and the world, is hanging upon their work,—while we are wasting transportation that they need?

The problem of a contented and effective working force in our shipyards will not be solved finally by rhetorical preachments to the ship-workers at their luncheon hour, by flag-raising, or by brilliantly-colored posters—valuable as all these are, but by the definite solution of the discouraging problems of bad housing, inadequate transportation, inadequate amusements, and so forth.

What can the business men of the United States do, especially in these fields, to increase the speed of ship construction? The Chamber of Commerce of the United States, through its War Shipping Committee, has tried to formulate an answer. Let me state and discuss the two principal parts of that answer.

First.—We can see to it that our local business organizations, in every community where ships or ship parts are being turned out, shall make it

their first business to organize themselves into an effective aid to shipbuilding.

For the local business organizations, this will mean the working out of a clearly-defined programme to fit the specific needs of each community. This should not be a blanket offer to help, but a carefully-organized service.

We must remember that, before the war, shipbuilding was not on the whole a large business in which profits came easily. Profits came only through the greatest attention being given by the executive to the details of the business. In normal times, shipbuilders did not face the challenge of a business of enormous size, involving the varied problems of housing, transportation, and all the other related problems that now center in and around the shipyards.

The present unprecedented demand for ships means that every shipbuilder should have his whole time and energy free from every problem other than the actual construction of ships. If the business organizations in every community where ships, or ship parts, are being produced made a survey of their membership, they would find in their membership men who know such problems as housing, transportation and power; they would find many corporations from whose staffs experts on these matters could be drawn, to say nothing of the transportation and other experts that many chambers of commerce employ. The membership of these organizations contains business men whose personal connections would make it possible for them to deal with a maximum of promptness and efficiency in instances where the transportation of shipworkers called for unusual measures by the local street railway company, or where the situation demanded unusual measures on the part of the local electric power company.

The business men of any community can organize their expert knowledge and specialized abilities, and put them at the disposal of the shipbuilder in a way that will relieve him of many such problems as housing, transportation, and power to which he is now giving attention which should be given solely to the actual building of ships. With such organized assistance on the part of business men, the shipbuilder could sit in conference with the business group—say once a week—thus keeping the necessary executive oversight while at the same time being relieved of many distracting problems.

Put Private Business Second

IN such conferences it would be found that the organized business genius of the community could help not only in matters of housing, transportation and the like, but in the larger matters of the business of shipbuilding itself.

This means of course that the business men best fitted to do these things must make them their first concern, putting their private business secondary while this crisis is on. Making one's private business secondary to the na-

tion's business of war of course means sacrifice. It means, for instance, that we shall, when sending agents to ask for priority of shipment of materials we need in our businesses, instruct our agents to say that, however vital our personal demands may be, ship materials must be given precedence.

There are many other ways in which business men may help in the expression of their sacrifice in organized action. To cite but one more instance, in the final analysis, we shall not be willing at a time like this, that private plants shall have better skilled workmen than the shipyards, or that a shipyard shall ever have a labor shortage while the labor force of any private business remains full. Organized business can make this impossible in every community just as the organized business of Rochester has seen to it that the demands of the munitions plants of Rochester have first call on all the labor of the city, wherever and by whomever it may be employed at any given time.

Secondly.—We can help organize the community behind shipbuilding in as definite a manner as we can organize the business forces back of shipbuilding.

This part of the answer comes last, because it is only after we business men have made definite personal and corporate sacrifices for the success of shipbuilding that we shall be in a position to ask the community at large to make like sacrifices.

We can ask and help the community to do such things as these, pending the time when entirely adequate housing and transportation facilities have been supplied:

1. To carry workmen to and from their work.

The car lines in many communities are unable to meet the extra load. Some communities have solved the problem by

changing the local business schedule, opening stores and offices a half hour later, so that the rush of workmen will not come at the same time as the normal rush hour. A business organization might make a survey of the private automobiles of the community and with proper leadership virtually requisition the services of owners of private automobiles to carry men to and from their work, so they may do their work for the nation to the best advantage. Can one imagine workmen so treated striking before submitting their differences with their employers to the government agency for arbitration?

2. To take shipyard workers into private homes until other accommodations are ready—regardless of personal inconvenience.

The Government has just appropriated \$50,000,000 to build houses, but they will not be ready in less than six months, and we cannot wait. Care should be taken of course, to make careful choice of the right man for the right home, and the plan applied in the light of the real moral, social, and sanitary questions involved.

3. To adopt a definite policy of recognition of the ship-worker.

This might be done in such ways as providing that ship-workers wearing the official badge be admitted to moving picture shows and other places of amusement at a reduced price of admission. It is not merely a question of a difference in price. It is the clear implication that goes with it that the community honors and appreciates the ship-worker, the industrial soldier, as it honors and ap-

preciates the military soldier in the trenches.

Such a programme may sound like a collection of makeshifts that does not strike at the real necessity for an adequate housing and transportation programme. In a sense, these are makeshifts, these are palliatives, but we face a critical situation in which something must be done now. Such a programme as this will not only bridge over the time between now and the conclusion of an adequate Government programme on these matters, but such a programme, in which practically every citizen in every community will be called upon to play a part, will contribute beyond estimate to the awakening of a public opinion in this country which will, more than any other thing, both insure and hasten an adequate solution of our shipping problem.

"They Shall Not Pass"

IT is time for the frankest facing of facts. We are in the most critical period of the war. During the next few months we shall send more and more troops to meet the stress and strain of the war at this crucial time. In any but this extraordinary situation, we should keep our troops on American soil until we were sure that we had ships enough to keep them fully supplied and at the same time keep uninterrupted the flow of supplies to nations associated with us.

But, notwithstanding a shortage of ships and the possibility of a continuing shortage of ships, our Government will send the troops, relying
(Concluded on page 87)



© UNDERWOOD AND UNDERWOOD

After ships, railroads, and trucks have done all they can, the supplies must go forward from the last depot by horse or mule wagons. The foibles of the "Missouri Mocking Bird," with his deftness at supporting them with his heels, were a source of mingled dismay and delight to the English when the first contingent of these animals arrived at the front. With all his temperamental faults, the hardihood and level-headedness of the mule makes him indispensable as a war agent.

The Miracle of the Ships

Realizing Their Duty to Our Fighting Men, Workers and Executives Are Straining toward the Accomplishment of Their Great Task despite Delays and Follies

By CHARLES A. EATON

Head of the National Service Section of the Emergency Fleet Corporation

AMONG all the heroism in this heroic war, no single enterprise outside the battle zone surpasses the shipbuilding programme of America. When the story is told, and we are able once more to see facts in their proper perspective, the American nation will look upon the shipbuilders of this country as worthy of gratitude and admiration second only to the heroes of the firing line.

I think in performing the duties of my office, as head of the National Service Section of the Shipping Board, I have visited shipyards over wide areas of the country, investigated conditions, and personally addressed over 150,000 ship-workers. With this opportunity to see the facts as they are, I give as my reasoned conviction that our shipping programme, as carried through to the present moment, is just as good as the American people deserve; in some respects, I should say, better.

We were not a maritime nation. We had only a few shipyards, a small group of men experienced in the business management of shipbuilding, and a small company of skilled ship-workers. Every shipyard already established in our country was swamped with contracts, from our own and other governments. As a nation, we lost two years and nine months of most valuable time, because we would not face the actual facts nor prepare for the inevitable conflict with Germany. These were the conditions under which, a little over a year ago, our government, through its Shipping Board, launched the most gigantic, single industrial enterprise in the history of the world. We have filled our newspapers with columns of ejaculation, because our government appropriated a billion dollars for all purposes, in the course of a year. But here is one single branch of the government which proposes an expenditure, for industrial purposes alone, three times as great as this nation has ever spent in the most expensive year of its history in times of peace.

We had no men available experienced in the business management of ship construction and operation. They have been gathered out of the trained ranks of business throughout the country, and are now coming to the point where they can qualify as expert leaders. We had no industrial organization equipped for or accustomed to turning out materials for shipbuilding on a large scale. Our transportation system was breaking down, under the strain of war conditions. We had to locate, build and equip more than one hundred new shipyards; we had to recruit, organize and technically train an army of hundreds of thousands of men for the shipyards which we were thus providing.

In one great plant, at Hog Island, in the Delaware district, there was no one among all the strong men associated with the enterprise who seemed to have imagination enough to visualize the fact that they were undertaking, not simply to build a shipyard, but to build a city of 30,000 population, containing the largest shipyard in the history of the world. They have built the city in less than six months. When we consider weather conditions and other adverse influences, I look upon the Hog Island shipyard as one of the most heroic achievements in the industrial history of the world. In less measure, but just as truly, this statement applies to scores of other enterprises.

The management of these enterprises have undergone a nervous strain without parallel. On one side they have had the government demanding, in the name of the people, results,

and they have seen the foundation of this demand in the terrible necessity, for ships, unless we were to meet defeat at the hands of the Hun. On the other side the management have been confronted with most difficult and dangerous labor conditions. In addition it has been a physical impossibility to secure the materials needed, both for the erection of the shipyards themselves and for the building of the ships. Meanwhile a frivolous public opinion has clamored for the performance of a miracle.

It is a physical impossibility to build ships without equipment, and the equipment demanded for the production of anything approaching an adequate supply of ships could not have been built, under war conditions, in less time than it has taken to bring us to our present point.

The three fabricating shipyards, at Hog Island, Bristol and Port Newark, constitute a larger equipment for the building of ships than is possessed by Great Britain, the leading maritime nation of the world, after a thousand years of normal growth. To condense into one year an industrial development which, normally, would have required centuries, is an achievement without parallel.

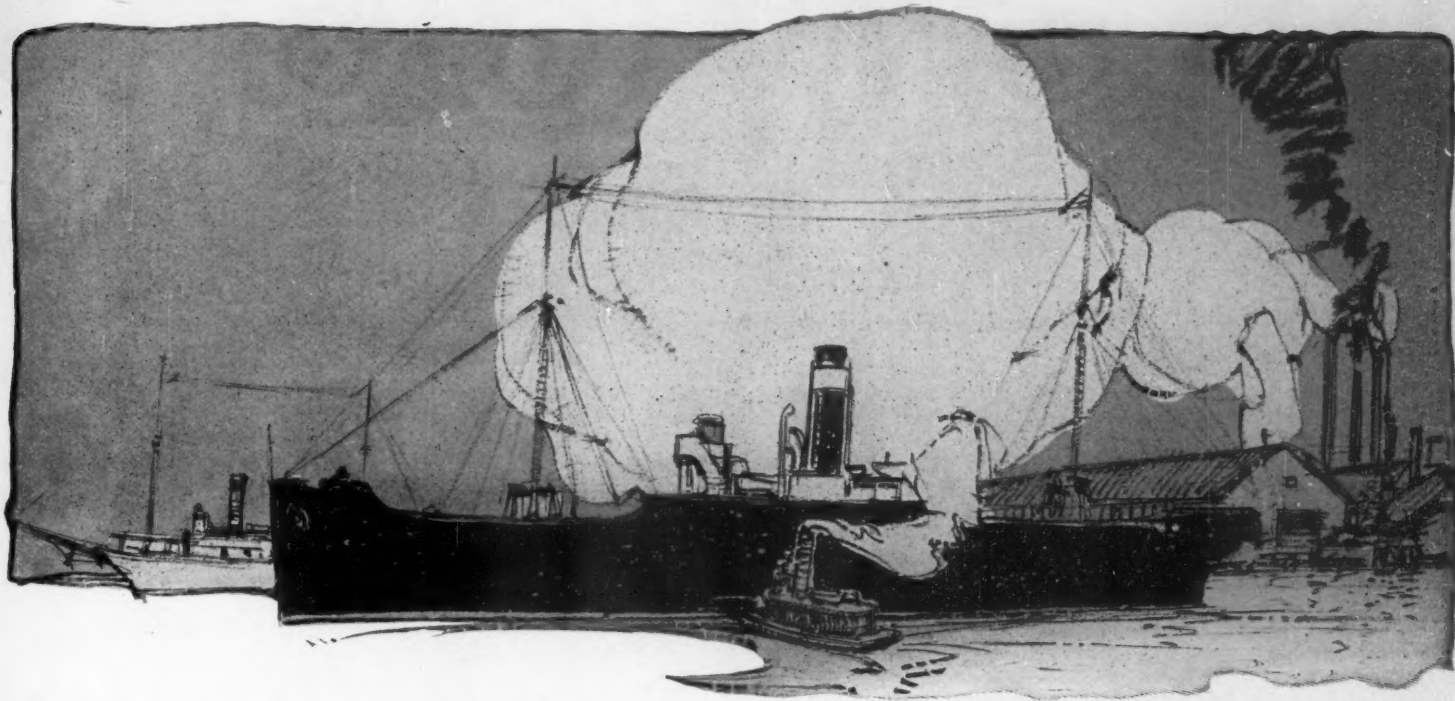
As to Shipyard Labor

THE period of preparation for the production of ships has almost passed. We shall have a few difficult months yet, in which we must hold on against the Hun, no matter how the battle may go against us. Then, suddenly, these titanic preparations will begin to produce concrete results, and we shall see ships put into commission with a speed beyond belief. The equipment in one district alone will give us a new ship every two days. One shipyard, when running as it will be shortly, to its full capacity, will put a new ship in commission every week. We have made mistakes; there have been delays, and waste and failures; but I contend that, under the circumstances, the entire shipbuilding programme is a credit to our government and to the men who have carried it forward so heroically.

The labor situation in the shipyards of this country is simply a cross section out of American life. I believe the working men in the shipyards, man for man, will bear favorable comparison with any similar number of men taken from almost any class in the nation. They have been paid more money than ever was received by this class of labor for similar work before. This, itself, has constituted a danger and an embarrassment. Shipyard laborers and their leaders, like the rest of the American people, are only now beginning to realize that their nation is at war, and, therefore, in deadly danger. All that these men need is to be told the truth; they will respond with ever increasing sacrifice, efficiency and devotion to duty.

The spirit of these thousands of men is fine; they are open to the truth, and the majority of them will, I believe, come to the scratch like other (Continued on page 85)





If Business Takes the Trade Acceptance

It Meets the Needs of All Industry, and It Would Be a Wholesome Tonic for Lax Business Methods

By LEWIS E. PIERSON

Chairman of the Board, Irving National Bank, New York

GR^{EAT} numbers of American business men still are uninformed concerning the details of the trade acceptance method and, therefore, unconvinced as to its merit. Others honestly believe that conditions within their particular business or industry are such as to make this method poorly suited to their purpose. Still others, those of an ultra-conservative type, while conceding merit to this method, are not disposed to disturb an existing business condition which in the past has appeared to them sufficient for their purposes.

There is another class which, in spite of the obvious advantages of the trade acceptance to general business and to the nation, opposes it because it appears to threaten certain business privileges—cash discounts for instance. Such objections, however, need cause us small worry; the fears are unfounded.

The attitude of still another class of American business men may be described as unduly cautious. In discussing the trade acceptance, they ask: "What are the bankers of the country doing for this method?"

The only answer possible to this class of questions is that we do not know what the bankers are doing or will do. It may be assumed, however, that the banker possesses sufficient business intelligence to be able to appreciate the merit of the superior article when it is presented to him for sale or discount.

This same attitude of undue caution also finds expression in this question: "What are the great industries of the country doing in the trade acceptance connection—oil, steel, tobacco, rubber, etc?" Nothing at all unusual probably—doing business as in the past on a cash basis—discounting their bills and not worrying in the least about the question

until their own need for commercial credit presents itself to them as a business problem. When that time comes these industries will meet and solve that problem as they have solved other problems which have come to them in their business operations.

It can be said that even now and well in advance of that contingency, these great industries are studying the trade acceptance method in a manner which shows conclusively that they fully appreciate its merit for general purposes and are not at all certain that it does not possess advantages for their particular purposes.

From the Pacific coast comes information to the effect that the entire flour industry of a great district has gone upon a trade acceptance basis. Further south, lumber and cotton have interested themselves in this method upon an exceedingly liberal scale. Prominent tobacco concerns are taking and giving acceptances freely. One of the greatest of the country's electrical establishments has gone upon an acceptance basis, and others are carefully considering the merits of this method.

One of the prominent financial experts in the oil industry has stated that there is not one argument in a thousand against the soundness and superiority of the acceptance method; but because of the superabundance of available cash, he finds no use for this method in the particular concern with which he is connected. Naturally, he refers, as we do, to the value of the trade acceptance for purposes now served by the open account.

It is useless to endeavor to discover any merit in the open account method. It is wrong, vitally wrong—it is almost wholly unsound. It came into existence not as the result of normal business development, but

through the existence of defects and unfortunate tendencies.

It finds no justification in any legitimate business condition I have been able to discover—not even in necessity, as there is no purpose which possibly can be served by this method which cannot be served much more satisfactorily by other available methods, principally trade acceptances.

The open account method is weak, not only because it fails to serve properly the purposes for which it was created—namely, to express a commercial obligation—but also, and perhaps more seriously, because it has tended towards the development in perfectly honest men of habits of carelessness, lack of caution, indifference, business recklessness, not in the least easy to reconcile with the theory of commercial honesty.

"I Promise to Pay"

UNDER this method the buyer of merchandise promises to pay. This is not a written promise, at best it is only verbal, and in the great majority of cases does not go beyond the form of a mere understanding, which ordinarily covers not all but only a few of the details entering into the transaction.

The merchandise transaction from which the obligation grows remains wide open until the debt is fully paid. If the buyer desires to return a part of the merchandise delivered, or to cancel orders, the burden of proving correctness of deliveries rests not upon the buyer but upon the perhaps entirely blameless seller.

Under the practices and customs which have developed from this open account method, the seller of merchandise actually performs a gratuitous banking (*Concluded on page 84*)

A CONTINENT FOR A SHIPYARD

Steel Plate Made in Montreal Fits Plate From Sharon, Pa., Rivets From Pittsburgh Make Them Stay Put—And Lo, the Fabricated Ship

By GEORGE J. BALDWIN

Chairman of Board, American International Shipbuilding Corporation

EARLY in 1917, the Shipping Board announced that in addition to all tonnage securable from existing yards and even allowing for a very large production in the many new, small shipbuilding plants to be built, all estimated to produce about 3,000,000 tons, we must create not less than 3,000,000 additional tons per annum, and even this has since been found entirely inadequate.

How was this 3,000,000 tons of shipping to be built and who was there that could do it?

The problem then presented was the production of the largest possible number of first-class steel ships in the shortest possible time. They must be cargo ships of ample carrying capacity and satisfactory speed, and in answer to this problem, three entirely new ideas were carefully worked out:

1. The designing of a vessel radically simplified and standardized, not only as a whole but in each of its parts, a vessel which could be speedily constructed in large numbers, eliminating every possible variation in size and shape of material and the parts of which could be built in manufacturing plants which were already in existence to avoid the building of new plants.

2. This meant the mobilization throughout the country of all industries germane in any way to ship production. It included the bridge and structural steel industry, the builders of engines and boilers, the steel fabricators, the forges, machine shops and factories capable of producing any equipment going into a ship from propeller shaft to anchor chain, and, most important of all, it meant the utilization of existing and well-tried organizations and bodies of skilled labor in plants where they had been accustomed to work instead of moving them from their homes and attempting a disorganizing concentration at the new shipyards.

3. The reproduction of vessels in large numbers, every one of exactly the same construction, thus permitting the use of factory methods, in which America is preeminent. The new shipyard was to become an assembling floor of a colossal ship factory, whose machinery was already operating in a thousand cities, whose employees were the entire body of American skilled labor, and whose conveyor belts were the American railways.

What is a Fabricated Ship?

THIS was the solution of the shipbuilding problem presented to and adopted by the United States Shipping Board, which authorized the construction of three yards for the purpose of building vessels upon this new plan; yards to be larger than any ever before conceived, the largest of which should contain 50 ways or 25 per cent more than were then existent in the six largest American shipyards combined. It was planned to produce

1,000,000 tons per annum, or twice the annual merchant tonnage of all America before 1914.

To this new plant of the American International Shipbuilding Corporation at Hog Island, near Philadelphia, has been assigned the construction of 110 cargo vessels of 11½ knots speed and 7500 tons deadweight capacity, and 70 combined cargo and transport vessels of 15 knots speed and 8000 tons deadweight capacity, a total of 180 vessels, aggregating 1,385,000 deadweight tons, whose final cost cannot be less than \$225,000,000.

FROM present indications, destruction by submarines has perhaps passed its climax, and if continued at no greater rate for the balance of the year, we may expect by the end of 1918 to be producing an amount of tonnage very nearly approximating the war destruction for the year. But this can only be done by means of the so-called fabricated or assembled ship and by new methods of construction. If we are to win the war, we must have the ships in ample quantity and I see no other method of producing them in sufficient volume."

When we add to this the tonnage allotted to the other two assembling yards, we have a total of 370 ships to be built in these yards, aggregating almost 2,500,000 deadweight tons, at an average cost of somewhat over \$1,300,000 each, or a total of about \$500,000,000 worth of vessels. Approximately 50 per cent of the total tonnage of ships produced in this country, or 20 per cent of the total possible world's production will come from these three ship factories.

In spite of almost insuperable difficulties encountered during the past winter, these three yards are all in a sufficient state of completion and are now engaged in the actual construction of the vessels contracted for. The preliminaries are over, and the construction race has well begun.

How is this new principle being applied? What is a fabricated or assembled ship?

In ordinary shipbuilding practice in this country, from 75 per cent to 80 per cent of the parts of a vessel are fabricated in the shipbuilder's shops, the remaining parts are fitted in the vessel when and as needed. On the destroyer work at Fore River, fully 90 per cent of the work is fabricated before it reaches the vessel. The New York Shipbuilding Corporation at Camden has gradually increased its fabrication of parts until today approximately 97 per cent of the vessel is completed in its shops before being brought to the vessel to be put in place. These same shipbuilders have now assisted the American International Shipbuilding Corporation in its plans to have more than 99 per cent of the parts manufactured in the fabricating plants of the coun-

try. A plate from Montreal Canada, fits a plate punched at Sharon, Pa., while a shape fabricated and punched at Joliet, Ill., fits the rivet holes of the plates.

How is this done? The shipbuilding corporations received from the naval designer of the United States Shipping Board three drawings and certain specifications for each type of vessel. From these plans are made the usual drawings prepared in ordinary shipyard practice, approximately 200 in number, sufficient in the hands of expert shipbuilders who are permitted to fabricate and assemble the entire ship at their own plant.

But the parts and material for new ships are being fabricated and manufactured in more than 1000 plants throughout the country, hence a most complete and detailed set of drawings was necessary and has been made of every individual part of the ship, requiring not less than 1200 additional drawings. From these were made exact templates or wooden patterns whenever the intricacy of any particular part demanded it. Some 1400 of these were made for each type of ship. These drawings and templates were then sent to the fabricators. In addition to this mass of drafting work, the builders of engines, boilers and other parts each undertook the detailed planning of their allotted parts of the vessel. Fourteen hundred drawings are required for the hull of the vessel alone.

In ordinary practice, a paper pattern would be placed upon a ship plate, say 27 feet by 6 feet in size, all rivet holes marked upon the plate and then slowly and carefully punched out, one at a time. The new method of quantity production of 100 or more identical vessels required only the same pattern which sufficed for all the boats. Machine spacing of rivet holes and machine punching either of single holes or multiple groups at a time are used, and 100 plates prepared with much less labor, in shorter time and with greater exactness than by the older way. Every possible part of the ship is thus manufactured in wholesale quantities in the great fabricating shops of the country, which are thoroughly equipped to do this work from long experience in bridge building, or structural steel work of other sorts.

Producing Skilled Workmen

ALL the engines for each type of ship are built in quantity and exactly alike by the largest engine builders in the country. The boilers are duplicated in a similar manner, as are the anchors and chains, and so on throughout the entire ship.

One of our problems, of course, is to secure a sufficient number of skilled workmen. Can we get them? The Department of Labor has 250,000 volunteer ship workers on its list. The American Inter- (Concluded on page 52)

SHIPPING *via* THE HIGHWAYS

By ROY D. CHAPIN



IN the last six months there has come to our view an entirely new picture of transportation in America. We are standing at the threshold of wonderful new developments. We have seen the railroads taken over by the United States Government, and, simultaneously, we have seen the highways of the country taken over by the people for the purpose of hauling goods which could not be hauled during the period of railroad congestion by the railroads themselves.

In the whole history of transportation, highway transportation has been the patient drudge. Suddenly the motor truck has come forward and has supplied for the highways what the steam engines supply for the railroads, and the electric car supplies for the interurban systems—rapid transit. And this has brought about many new conditions.

These conditions pertain not only to the roadbed itself, but also to the development of types of traffic which we, I think, have not yet seen or pictured in our imagination.

Governmental recognition was given to this fact, and it finally resulted in the establishment of the Highway Transport Committee of the Council of National Defense. This committee, of which I am chairman, is the first committee or organization of any authority under the Government which has ever paid any attention to highways traffic.

A great increase in transportation efficiency must come from the motor transport, and that being so our committee has directed its efforts to the study of the possibility of motor transportation. The motor transport fills a niche that is not filled by any other means of haulage. It takes goods from the door of the shipper to the door of the consignee without change or rehandling.

Sometimes it takes a freight car moving out of the big terminals as much time to arrive at its destination, which may be at a distance of

only 30 or 40 miles, as it would take that same car to travel hundreds of miles if it were directed along the main line of the railroad. This means that that short haul movement is cluttering that terminal, and any railroad man—at any rate any I have talked with so far—will say that it is the terminal to-day that is the crux of our present tie-up. The getting of freight cars through the terminal and back on to the main line again solves that problem.

Daniel Willard said to me, when I first came to Washington, that there was no serious problem moving on the main line; the terminal was always the neck of the bottle. He said also, shortly after our committee was appointed, "I see a new ideal in transportation which I could not see before I came to Washington. I see transportation in the future, that is, traffic given to that means of transportation which can best and most economically and most quickly carry that traffic."

"I recognize the utility of the motor truck in its particular field. It can carry a portion of that traffic. Go ahead and see what you can do to put that traffic on the highways that legitimately belongs on the highways."

To-day most of our larger cities, especially, I think, in the eastern zone, where traffic congestion is the worst, have established inter-city truck lines, plying back and forth on a regular schedule, carrying goods at a more rapid rate than either the railroads or express lines, and in many instances taking them right from your door and delivering them to the door of your consignee. These motor truck lines will soon form a perfect net-work throughout the United States, and they will live, not because they are well financed, not because they are run by an enthusiast, but they will live on a competitive basis where they can prove that they will carry that traffic more quickly, more expeditiously and more safely than any other means of transportation.

That is the future of the inter-city truck line in our transportation plans.

When we went into this thing last fall, we found that the Connecticut Council of Defense, because of very serious freight congestion, being tied up as they never had been before, were considering this same proposition. At our suggestion, they adopted the English plan, and established throughout the entire state fourteen "return loads bureaus."

What happens now in Connecticut? Suppose, as a manufacturer, you are sending your motor truck from Hartford to Waterbury. You want to ship a load up there to some man you are doing business with in Waterbury. That motor truck must come back, and you have no load for it. It does not pay you to ship a truck up to Waterbury and have it come back unloaded. You go to Waterbury, your truck arrives there, and your driver calls up the Waterbury return loads bureau and says, "Have you a load for Hartford?"

Keeping the Truck Loaded

THE business of that return loads bureau in Waterbury, just as in any other city in Connecticut, is to know what the merchants and manufacturers have in the way of loads, radiating out from their city. The loads are registered with them. This driver is very liable—not certain, but very liable—to have a truck-load going back either to Hartford or some other point on the way.

That does not sound very big when applied to one state, but I am glad to say that the same idea is rapidly coming into use elsewhere.

It is not only by inter-city service that the motor truck can lessen the pressure on the railroads. They can do it as well by helping when freight has reached its destination. For some time past we have been working with the railroad administration on the problem of getting freight moved (*Concluded on page 70*)

Business and the First Year of War

(Concluded from page 23)

this work has been done in Great Britain, France and Canada.

Later, at a conference attended by the committee and by sixteen representatives of various bureaus of the Government, the conference recommended that the committee, as an entirely neutral agency, present to the Government a comprehensive plan which might lead to the creation of the proper central authority and the right kind of legislation to make the administering machinery efficient. Some days later the committee was informed of the existence of a draft of a bill in the Surgeon General's department calculated to offer a solution of the problem.

A conference "of all of the parties concerned" was called by the Secretary of War to consider this. It met on January 13, with Surgeon General Gorgas presiding. Allen Walker, secretary of the Chamber's committee, was present.

At that meeting resolutions were adopted which the committee believes offer the most business-like solution, and imply the short-cut method and singleness of direction favored by the committee.

The committee now urges that employees liability is one angle of the subject which should have attention in the bill which Congress will be asked to pass.

The report mentions that representatives of insurance companies, when consulted, have been eager to cooperate in prompt and generous fashion with whatever plans might be adopted to rehabilitate disabled service men.

The committee is composed as follows: F. A. Seiberling, chairman, Akron, Ohio; Charles L. Allen, Worcester, Mass.; A. C. Bedford, New York; George B. Foster, Chicago; P. H. Gadsden, Charleston; Paul J. Kruesi, Chattanooga; Robert S. Lovett, New York; John L. Powell, Wichita, Kansas; Eliot Wadsworth, Washington; H. H. Westinghouse, New York; Allen Walker, secretary, New York.

The Committee on Budget and Efficiency recommended that the Chamber use its best efforts to secure the adoption of legislation authorizing the President to coordinate or consolidate executive bureaus, agencies and offices and for other purposes, in the interest of economic and more efficient concentration of government. Also that the Chamber advocate the passage by Congress of a bill which will authorize the President to prepare and submit to Congress the estimates of Government expenditures, and to accompany such estimates with statements setting forth the resources and obligations of the Government now and in the past, together with estimates already reviewed, and all expenditures for the year in progress. Also other statements and data that would make known freely the financial condition and operation of the Government.

Further, that the Chamber advocate the appropriation of funds necessary to enable the President to provide himself with a staff to do the work.

The committee is composed as follows: W. L. Clause, chairman, Pittsburgh; Frank J. Goodnow, Baltimore; W. F. Willoughby, Washington; Paul W. Brown, St. Louis; C. K. McClatchy, Sacramento; W. H. Cowles, Spokane; Herbert G. Stockwell, Philadelphia; George G. Tunell, Chicago.

The Advisory Committee of the Organization Service Bureau makes a report which ends with the suggestion that the Board of Directors consider the advisability of in-

creasing the personnel of the Bureau. At present the staff consists of the Bureau Chief and stenographic clerk. There has developed an increasingly insistent demand for personal visits to member organizations together with a great increase in bureau correspondence and research work. The recommendation is backed by an account of the activities of the Bureau in extending its services to whatever commercial organizations may need them.

It is accompanied by the report of the chief of the bureau, Colvin B. Brown. This gives in detail an account of the service rendered by the bureau during the past year and of the growth of the demands made upon it.

The Advisory Committee of the Organization Service Bureau is composed as follows: S. C. Mead, chairman, New York; William George Bruce, Milwaukee; S. W. Campbell, Chicago; John M. Guild, Kansas City; E. K. Hall, New York; J. R. A. Hobson, Evansville; Carl A. Johnson, Madison, Wis.; E. W. McCullough, Chicago; George D. McIlvaine, Pittsburgh; John Wood, Roanoke, Virginia.

This, then, is a bird's eye of the part organized business of America, as represented by the National Chamber, has played in the first year of the great war. It is constructive throughout, and its effects will surely be felt in no small way when Government and business take up the work of reconstruction.

Referendum No. 20 had to do with financing the war. In its vote the Chamber went on record as favoring the raising of \$400,000,000 by taxation the first year of the war, from increased individual income taxes, and the like; the raising of \$200,000,000 from excess profit tax; an increase in the first class postage rate of fifty per cent; that stamp taxes be imposed to yield \$250,000,000 the first year; that articles of luxury be taxed to raise \$500,000,000 the first year; that retroactive taxes be imposed on incomes and profits; and that exemption from the capital stock tax be decreased from \$99,000 to \$24,000.

Referendum No. 21 was on the railroad regulation. Here the Chamber voted that provision be made for federal regulation of the issuance of railroad securities. That Congress pass a general railroad incorporation law under which all railroad carriers subject to the jurisdiction of the Interstate Commerce Commission, may organize; that if Congress passes a railroad incorporation law, all railroad carriers subject to the jurisdiction of the Interstate Commerce Commission, both those now existing and those hereafter to be created, be required to organize under this law; and that since conflict has arisen with respect to the jurisdiction of the Interstate Commerce Commission over intrastate rates, even though such rates affect interstate commerce—the committee recommends that the commission be given authority by statute to regulate

intrastate rates when those rates affect interstate commerce.

Referendum No. 22 concerned price control. Here the Chamber recommended additional legislation to create authority to control prices during the war; that authority to control prices should extend to all articles which have importance in basic industries as well as in war, and which enter into the necessities of everyday life; that authority to control prices should extend to raw materials and finished products; that authority to control prices should extend to the prices the public pays as well as those paid by the Government; that authority to control prices should be administered by a small executive board appointed by the President; that an agency working in harmony with the board controlling prices should have authority to distribute available supplies to those purchasers whose needs are most directly related to the public welfare; that each leading industry and trade should create a representative committee to represent it in conference and to advise with agencies that control prices and distribution.

REFERENDUM No. 23 was a pronouncement on trade relations with Germany after the war. It was submitted by the Boston Chamber of Commerce. It was passed by the National Chamber in this form:

RESOLVED, That the Chamber of Commerce of the United States of America earnestly calls the attention of the business men of Germany to these conditions and urges them also to study this situation and to cooperate to the end that a disastrous economic war may be averted and that a lasting peace may be made more certain.

Referendum No. 24 dealt with water power development. The Chamber recommended that federal legislation encouraging the development of water powers should at once be enacted; that authority to grant permits should be vested in an administrative department or commission; that the permit period should be at least 50 years, any shorter period being at the applicant's option; that tolls should attach only to use of public lands or benefits derived from head-water improvements; that permittees should be entitled to acquire the right to use public lands forming only a small and incidental part of the development; that recapture be exercised only upon payment of fair and just compensation; that, if recapture is not exercised, the investment of the permittee should be adequately protected; that rates and service should be regulated by state commission where the service is intrastate, with federal regulation only where several states are directly concerned and do not agree, or there is no state commission; that if any jurisdiction to regulate the issuance of securities is exercised it should be solely by the state; and that no preference should be granted as between applicants amounting to a subsidy from the Government creating unequal competition.

A Continent for a Shipyard

(Concluded from page 50)

national Shipbuilding Corporation has agreements with 15,000 skilled men to proceed to its yard whenever required. Although these men are not yet skilled in shipbuilding, they have been selected from trades where the workers are most skilled in the handling of similar tools. A bridge building riveter, for instance, can be trained in a few days, a steel building riveter taking a

little longer, to become expert in ship riveting. The same is true of other workers.

When the great ship plant at Hog Island begins the launching of its ships at the rate of one every other day, a flood of ships carrying the American flag will pour out into the Delaware River in a never-ending stream of 1,000,000 tons each year until the war is ended.

Waging War with the Tax and the Bond

The Real Meaning of Them Both for Us Is— Let Us Save and Serve; Tomorrow We Crush the Hun

By CHARLES S. HAMLIN

Of the Federal Reserve Board

THE immediate problem before our people is to raise the money for the third Liberty Loan. Our boys, hundreds of thousands of them, are in the trenches abroad—a mighty army. They are pouring out of this country by the thousands, and it will be a mightier army. I make the prediction that we shall not have permanent peace in the world until our Army and our Navy in their full strength are on the other side with the Allies, and our people have pledged to those boys the entire resources of the United States in their effort—their successful effort I believe—to bring that peace to the world.

This loan can easily be raised. We have a national wealth estimated at, I suppose, from 200 to 250 billions. Our yearly income is supposed to be from 40 to 50 billions, and our net savings I have heard put as high as 15 billions. Nevertheless there are two absolutely essential things for the American people to do. We have to increase the production of necessities for war, and we have to reduce the production and the consumption of luxuries and non-essentials.

The war, in other words, must be financed largely out of our savings. The Government wants goods, it does not want money. It wants materials, clothing, shot and shell, and what we give to the Government, we must go without ourselves. In that way, the war can be financed as it ought to be financed. If we do not do that, but finance it largely by borrowing, and do not pay the loans at once, we are going to have an inflation of prices such as this country has never seen before. Such inflation would mean higher interest on Government bonds, and higher interest rates for merchants. Millions of people living on fixed incomes would be overwhelmed by the disaster such inflation would surely entail.

Now there are two extremes. We hear some people say, "business as usual;" others, "absolute destruction of non-essentials." I hope we can find a happy medium between the two. Non-essentials should be changed gradually to essentials. Labor should be gradually released and mobilized, and shifted from the non-essentials to the essentials. But when we talk of business as usual, we might as well say, "Let us eat and drink, for tomorrow we die." Our motto should be, "Let us save and serve, for tomorrow we crush the Hun."

There is a limit to credit as there is a limit to goods; as there is a limit to water. In a great conflagration, if the mayor of a city should say that every drop of water must be saved, because it was all necessary to put out that fire, and some man should arise and say, "No; I believe in business as usual; I am going to use that water to sprinkle my lawn, and make my flowers grow," it would not take long for the people of that town to satisfy him that his course was not patriotic.

There must be conservation of capital. To that end, the War Finance Corporation, which provides for the saving of capital expenditures, was created. There is a Capital Issues Committee, which is going to be of the greatest assistance. It will help the public utilities of the country; it will help toward the building of the houses needed by the people. It will promote, furthermore, the building needed by the country for war industries, and it will aid the great industries at work for the Government. It will be a great boon to the savings banks and stabilize the securities market of the country. I believe that out of that measure things will take a different turn. We are going to have supreme confidence in ourselves.

We are doing a great work. No man could come to Washington for a day without seeing the great work that has been accomplished there, the great work of preparation. History will reveal it. There have been errors, of course, but let no one mistake a fly-speck on a great picture for the picture itself.

The greatest preparation any people ever made for either peace or war was the passing of the Federal Reserve Act. The Federal Reserve system is flourishing. The twelve reserve banks today hold in their vaults

\$1,800,000,000 in gold.
Take all of the gold in the vaults of the Bank of England and add to it

all of the gold in the vaults of the Bank of France, and to that add all of the gold in the vaults of the Banks of Italy and Spain—it would not nearly amount to \$1,800,000,000.

Only the other day Sir Edward Holden, the president of the largest bank in Great Britain, said our Federal Reserve system was the soundest system on the face of the earth, and he begged the British people to amend their banking act and remodel the Bank of England along the lines of the Federal Reserve system of the United States.

Today 75 per cent of the banking resources of the country have joined the Federal Reserve system. In my opinion, it is the patriotic duty of every sound bank or trust company in the United States to come into the system and give us their gold, so that we can broaden the base on which to build up credit in the future. We will welcome their help, and they will need our help before the end of the war. They should enroll for their safety, and to help solve the great problems before us.

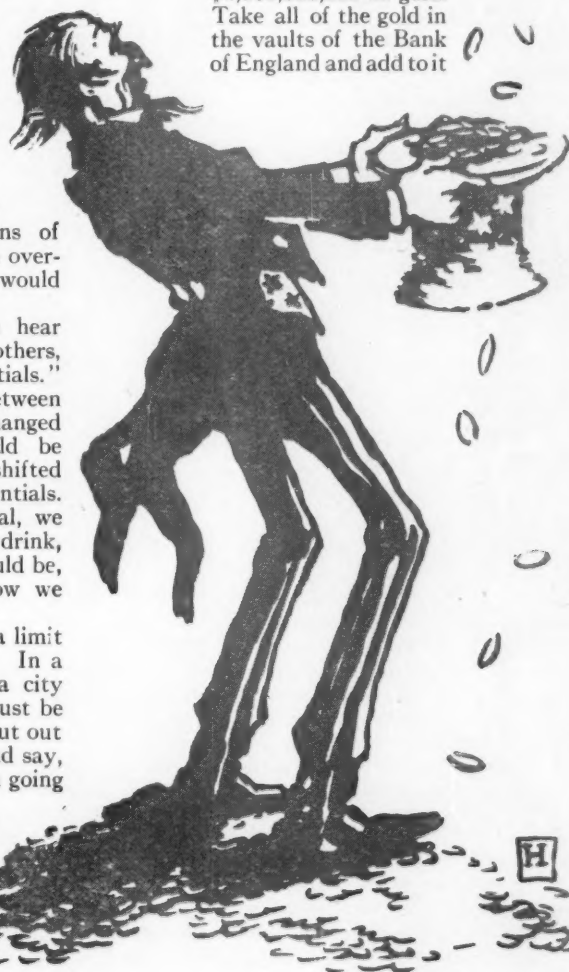
We have had marvelous business expansion. Some people tell us we have inflation. I have questioned banker after banker about that. I have asked them to define inflation and how it differs from expansion, and I venture to say almost every man has given me a different answer. If I were to define inflation I think I should have to define it in the same way that the clergyman did in regard to the five points of religion.

"You get religion when you don't want it. When you get it, you don't know it. If you know it, you haven't got it. When you get it, you cannot lose it. And if you lose it, my brethren, you never had it."

But we can apply a simple test to the Federal Reserve system. Out of our cash reserves today we can set aside 40 per cent in gold against the Federal Reserve notes, a billion, four hundred million approximately now outstanding. We can take that 40 per cent reserve from our cash reserves and there would be left a cash reserve of over 80 per cent against our net deposit liability. That, in my opinion, is not inflation. It is sound, conservative banking.

A great many people felt that we ought to have entered this war much earlier than we did. We should remember that when that brutal murder, the sinking of the *Lusitania*, was committed, the Federal Reserve banks had been open less than six months. Does anyone suppose we could have gone into a war involving the raising of 10 to 15 billion dollars a year under the old national banking system, or under the new system, developed as it was only six months? It would have been financial madness. But when we did enter the war, the Federal Reserve system was ready, and we had a sound structure upon which to build the credits which we will need in the future to carry on the struggle.

The cost of this war is stupendous. We originally estimated that it would cost 18 billion dollars a year. This year, for various reasons, we have spent less, and we were thus obliged to call for only 3 billion dollars in present liberty loan. (Concluded on page 83)



First Aid for The War Has Made Their Efficient Operation Imperative and the Public Utilities Public Must Be Encouraged to Give Them Adequate Capital

By **THOMAS N. McCARTER**

President, Public Service Corporation of New Jersey

IT has required the conditions which have been brought about by war to demonstrate to the nation that the public utilities of the country, while for the most part local in their operations, are national in their scope. The railroads of the country, with their interstate ramifications, have long been recognized as a quasi-public national industry of first importance. The telephone industry, possessing many characteristics similar to the railroad industry, under the highly efficient administration of Mr. Vail, has made such wonderful progress in the development of the telephonic art, that it is rapidly being recognized as a great national industry; but the other utilities,—and by that I mean privately operated gas companies, electric light and power companies, and electric railway companies,—have until now been regarded, for the most part, as merely local enterprises, concerning only that relatively small portion of the public served by them respectively.

That such is not the fact, present-day conditions abundantly prove. The every-day activities of the nation are as fully dependent upon them, taken collectively, as they are upon the steam railroads or the telephone. The fact that they operate in relatively smaller units is an unimportant incident. Their ability as a whole to perform their chief function,—that of providing adequate service,—is of vital consequence to the comfort and economic welfare of the nation. If this great industry, viewed as a whole, however it may operate, be unable to perform its proper functions by reason of political or economic oppression or from any other cause, a paralysis will spread over the business life of the country fully as fatal as would result from the collapse of the railroad industry.

If this country is ultimately to take its place in the forefront of the Allies and be the final decisive factor in the termination of the war, the integrity of the utility industry of this country must not only be preserved, but its activities must be speeded up to a point never hitherto attained. Its capacity for service must be greatly increased. The capital necessary to accomplish this result must be provided. The gas companies, as well as the by-product coke companies of the country, must be placed in a position where they can produce all the trinitrotoluol that the government requires for its high explosives.

Unchain the Power Companies

THE power companies must keep pace with the extraordinary demands being made upon them to furnish power in large quantities to the shipyards, to the aeroplane factories, and to the innumerable industries engaged either exclusively in the manufacture of war products or of materials which ultimately be-

come a part of war products. The electric railways, in addition to the performance of their usual every-day service, must be enabled to extend their lines to the war camps, the shipyards, the aeroplane factories, the shell-filling plants, and all other similar Government enterprises. They must be enabled to

their costs over pre-war conditions have enormously increased.

It is susceptible of proof that their labor and material costs have increased by an average of 70 per cent. What is true in the experience of every individual and of every industry is true of them, in many instances in more accentuated form. Unlike the ordinary private industry, however, they have not been able to "pass the buck" of increased costs to the consumer. The rates or charges of these companies have remained fixed,—because, like those of the railroads, they are subject to regulation, and differ from them only in this respect, that the railroads have been primarily controlled on this question by one central power, the Interstate Commerce Commission, a national body; whereas the utilities are, for the most part, governed in this particular by their respective state public utility commissions, and in many cases by municipal authorities as well. The Interstate Commerce Commission, being situated at Washington, may be expected to absorb quickly the spirit of the national necessity, but its control of the situation has been much impaired by the taking over of the railroads by the government.

The President, the Secretary of the Treasury and the Comptroller of the Currency, by their published statements above referred to, have done much to bring home to the various state regulatory bodies the necessity for prompt action to avert impending disaster. It is difficult, however, to overcome the deep-seated prejudices of the public, which are too often reflected in the decisions of state and local commissions.

There is now a country-wide movement under way by the utilities for increased revenue. In many cases, I am happy to say, state commissions are facing the issue courageously and granting the necessary increases; but if wide-spread disaster is to be averted, a public spirit of fairness and justice to these companies must be developed that will quickly manifest itself in the decisions of the state commissions.

No Bargain Counter Utilities

THE public must realize that in the economics of this business, as in every other business, two and two make four, and not two and three; and it must be willing to pay as fair a price for a thousand cubic feet of gas, a kilowatt hour of electricity, or a ride upon an electric car, as it freely pays for a pound of butter or a new pair of shoes. There is nothing peculiar about the utility business that excepts it from the inexorable laws of trade.

In the development of such a public spirit I can think of no influence which can be so effective as that radiating from the great body of business men of this country composing the Chamber of Commerce of the United States. The opportunity offered (*Concluded on page 70*)

THE breakdown of the street car system of Detroit would be a matter of concern not only to the citizens of that town who would be left standing on the corners stamping their feet and blowing on their fingers—if it were a cold day—but also to those of Jacksonville, where palm-leaf fans might be the order of the day.

It would be a matter of national concern. Thousands of persons in Detroit busy on war work would not reach that work or would be late, factories would be crippled, and Detroit would not do her war stint that day.

The present writer points out that our great public utilities, street car companies, gas companies and electric light and power companies, may suffer partial paralysis due to insufficient revenues, and maintains that there is present need, if they are to meet the war situation, that their revenues should be increased.

equip the new lines, as well as their existing lines, with sufficient cars, copper, power and crews to transport daily the multitudes of workers, running in the aggregate into many hundreds of thousands, suddenly superimposed in many localities upon an already over-congested business.

That the solidity and integrity of this great enterprise is essential to the successful carrying-on of the war by the government has been distinctly recognized by the administration. It was made the subject of vigorous comment by the Comptroller of the Currency in his last annual report, and more recently it has been the subject matter of correspondence between the Secretary of the Treasury and the President.

The utilities of the country constitute, if I may make use of the term, no "piker" industry. Viewed from every angle—from that of service rendered, from that of annual income, and from that of capitalization, they constitute a highly important factor in the economic life of the nation. They daily furnish the public with necessities of modern civilization. Their combined annual operating revenues exceed \$1,500,000,000. Their total capitalization exceeds \$10,000,000,000. They have funded obligations maturing in 1918 of approximately \$225,000,000. In addition thereto, they are carrying some \$300,000,000 short-term notes. Their securities are owned by millions of people, as well as by financial institutions. It would be difficult to find a banking institution in the country that would not be embarrassed by a permanent collapse of the credit of these utilities. Like those of every other industry in the country,

Cutting Our Locomotives to One Pattern

To Secure Standardization's Benefits, But Not at the Cost of Economy and Efficiency—a Thing to be Desired and a Task for the Railroad Administration

By ALBA B. JOHNSON

President, The Baldwin Locomotive Works

THE history of railroad development has been one of continuous improvement in size and power and in perfection and economy of details. The 85 years which have elapsed since the successful trials of the "John Bull" on the Camden & Amboy R. R., the "DeWitt Clinton" on the Mohawk & Hudson Valley R. R., and "Old Ironsides" on the Philadelphia, Germantown & Norristown R. R., have been years of constant experiment.

Each railway has endeavored to excel others in efficiency and power. Each locomotive builder has striven to excel his competitor.

It has been found that the readiest means of increasing revenues is to increase the carrying capacity of cars, so that a greater amount of revenue freight can be hauled for each unit of car mileage. This increase in car loading, has resulted in a demand for larger locomotives. And that, in its turn, has called for rails and bridges of a capacity to sustain the increased axle loads.

Again and again rails and bridge have been replaced to permit the constantly increasing axle loads—from 10 to 15 tons, from 15 to

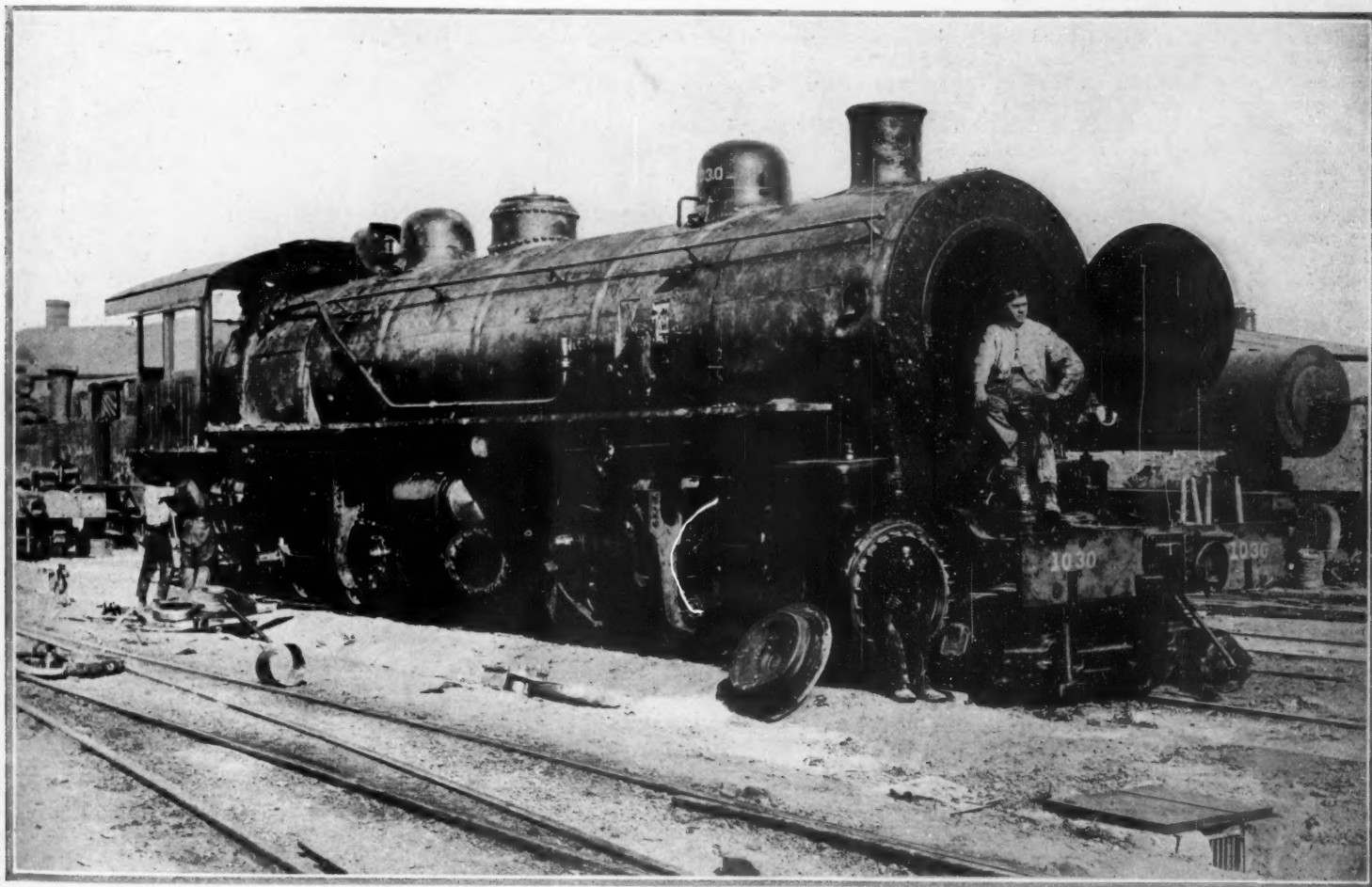
20, from 20 to 30, and finally to about 35 tons, the present maximum. Each change has involved practically the total replacement of rails, bridges, cars and locomotives on existing lines throughout the entire country, and each step has resulted in a reduction of the cost per ton mile until the cost of transportation in the United States has gone far below that existing in any other country.

In the majority of instances, each contract for cars and locomotives has been made to new specifications. Standardization has been an ideal much talked of but never realized, because standardization implies the crystallization of present practice as the practice of the future. It means that no further changes shall be made as the result of experience or invention. Carried to its logical extreme, the adoption of inflexible standards at any time during the history of locomotive development would have involved the stoppage of progress at that point.

Many attempts have been made to fix standards for particular railroads and groups of roads, but in every instance these have given way to the urgency of keeping pace with

other roads which have not attempted to bind themselves with the iron bands of standardization. The practical result of such attempts has been that those lines most rigidly adhering to their standards have lagged behind their competitors. More than 80 years' experience has convinced railroad men that the most advantageous field for standardization is in details rather than in the complete locomotive or car as a unit. Most of the advantages sought through standardization have been obtained by unifying or standardizing the design of various parts common to a considerable number of classes.

When the Government assumed control of the railroads, all of them, for the first time, in the history of the country, became subject to unity of management and to unity of control in their purchases. For the first time it became practicable to adopt and to enforce standards to a large extent. Competition had brought about a uniformity of general dimensions and weights of locomotives for trunk line service. Inasmuch as all kinds of cars were being hauled indiscriminately over all railroad lines, there could be no reason why



A long, long way from home but still working to the last ounce of its horse-power in the cause of the Allies. One of fifty huge Mallets bought for South Africa's railway just before the war started. It is being cleaned and overhauled in the shops at Germiston, Transvaal.

a diversity of details should exist amongst those belonging to different railroads. To a lesser degree, perhaps, these considerations, apply also to motive power. If one type of locomotive could haul a given train across the continent to the west bank of the Mississippi River, there appeared to be no adequate reason why a locomotive of different type or different details should be required to haul the same train from the east bank where the grades and working conditions were not too divergent.

Notwithstanding a certain amount of standardization of the locomotives on each road, there is a large diversity amongst different roads having practically the same operating conditions. The opportunity given to the Director-General of Railways to unify the motive power of all railroads was unique. The work of preparing standard specifications and drawings was entrusted to a committee comprising 11 railroad officials who collaborated with representatives of the three principal locomotive builders. As the result of their work, 12 standard specifications have been agreed upon and recommended, and their final approval is under consideration. No one railroad will be compelled to order all of the 12 standards; even the largest trunk lines may find half that number sufficient.

A delicate and interesting question of policy is to what extent these standards should be confined to the essential elements of the locomotive, and to what extent they should be confined to its accessories. The committee adopted the policy of defining only the essential locomotive, leaving a certain freedom to the railroads to maintain their standard accessories, and a certain freedom of competition among manufacturers of railway equipment. It should be borne in mind that the railway equipment business itself is a most important one, embodying several hundred separate manufacturers, with invested capital running into the hundreds of millions, and employing several hundred thousand men. These separate manufacturers have studied incessantly to improve their appliances and to reduce costs.

To carry standardization to its extreme limit would involve a determination of the most desirable among many competing devices, and would destroy the market for all the others and throw their makers out of business. It would also paralyze every effort toward the invention and introduction of new improvements.

Thinking It Through

(Concluded from page 10)

tiny was urged of all proposals to extend Government control, which the delegates thought should be avoided where not absolutely necessary. In view of recent Government practice the Chamber ordered a referendum on the anti-trust acts a formula was favored as the basis for figuring production cost. Correction of determined inequalities in the revenue acts was suggested.

Trade acceptances, which occupied about half the time in one of the groups, will be the subject of a Chamber referendum.

On rail transportation the Chamber outlined this programme affecting immediate concerns: Unified control of terminal facilities in each large city under a single manager, prompt purchase of cars and locomotives, standardization to be regarded as secondary in importance to getting the cars and locomotives. The Chamber directors are to call a conference representative of financial, industrial, com-

A strong plea is made, in connection with the question of the approval of the standard specifications recommended, similar in principle to that applicable to locomotive accessories, that each railroad should be allowed to adhere to the standards already adopted. The choice involves the weighing of the respective advantages. It may be said for the railroads' contention, that under normal conditions locomotives are not shifted from one road to another, but are generally used continuously upon the same division to keep the traffic movement balanced, and are kept in repair continuously by the same shops. These shops are supplied with standard repair parts, and the workmen are proficient in maintaining the repairs of these existing standard locomotives.

Will Standardization Stop Improvement?

TO introduce a Government standard upon all lines as an entirely new proposition, would be simple enough; but to introduce it on lines already equipped, and throughout the entire country, would be quite a different matter. It would compel all lines to provide themselves with stores of repair parts adapted to the Government standard locomotives. Thus, instead of simplifying the problem of locomotive maintenance, the introduction of Government standards would complicate it. These complications would last far beyond the period of Government control. They would continue as long as the railroad standard and the Government standard locomotives operated side by side upon the same lines.

If it should be urged that the advantages of standardization would in the long run be sufficient to compensate for the disadvantages of present increased confusion, then some principle must be discovered by which standardization will not cause the cessation, if not the extinction, of improvements. Every improvement in some sense involves the destruction of standardization. It would be an evil day for American engineering and American progress in the art of transportation which should see the introduction of a policy of discouragement of new and useful improvements in the art. We should therefore look carefully before we leap, to make sure that we are not giving up the substance of continued growth in efficiency and economy to grasp the chimera of standardization. Especially should we give this earnest consideration while the danger of war is upon us.

policy and in the ordering of our industrial conditions, effectiveness in industry and in our international arrangements the spirit of the open door. The convention petitioned the Government to operate existing equipment and construct new equipment on waterways, to complete trunk highways for heavy traffic and to co-ordinate railroads, water routes and highways.

National trade organization secretaries dined together and discussed plans for concerted effort. S. C. Mead, of New York, Chairman of the Chamber's Advisory Committee for the Organization Service Bureau, reported in National Council a recommendation that the staff of the Bureau be enlarged, especially to develop service to the national association. The commercial (city) organization secretaries carried through a programme of discussion.

What profiteth it? On the preliminary day in the National Council, members proposed suppression of alien language newspapers. This evoked one of those thunderous responses which signify a thoroughly pervasive and fervent approval. F. A. Seiberling of Akron took the floor and in a two-minute speech ringing with Americanism and Americanizationism asked how you could put your message over to these millions of a single tongue if you suppress the only language which they can read? The Council has thought it over, denounced sedition wherever found, but refrained from urging suppression of alien language publications as such and packed in their kits homeward bound a new alertness to the value of alien languages as avenues for crush-the-Hun propaganda. And after all that is what most profiteth the convention—contact, interchange, correction of vision, evolution of harmony out of diversity, achievement of that unity which has thought things through together.

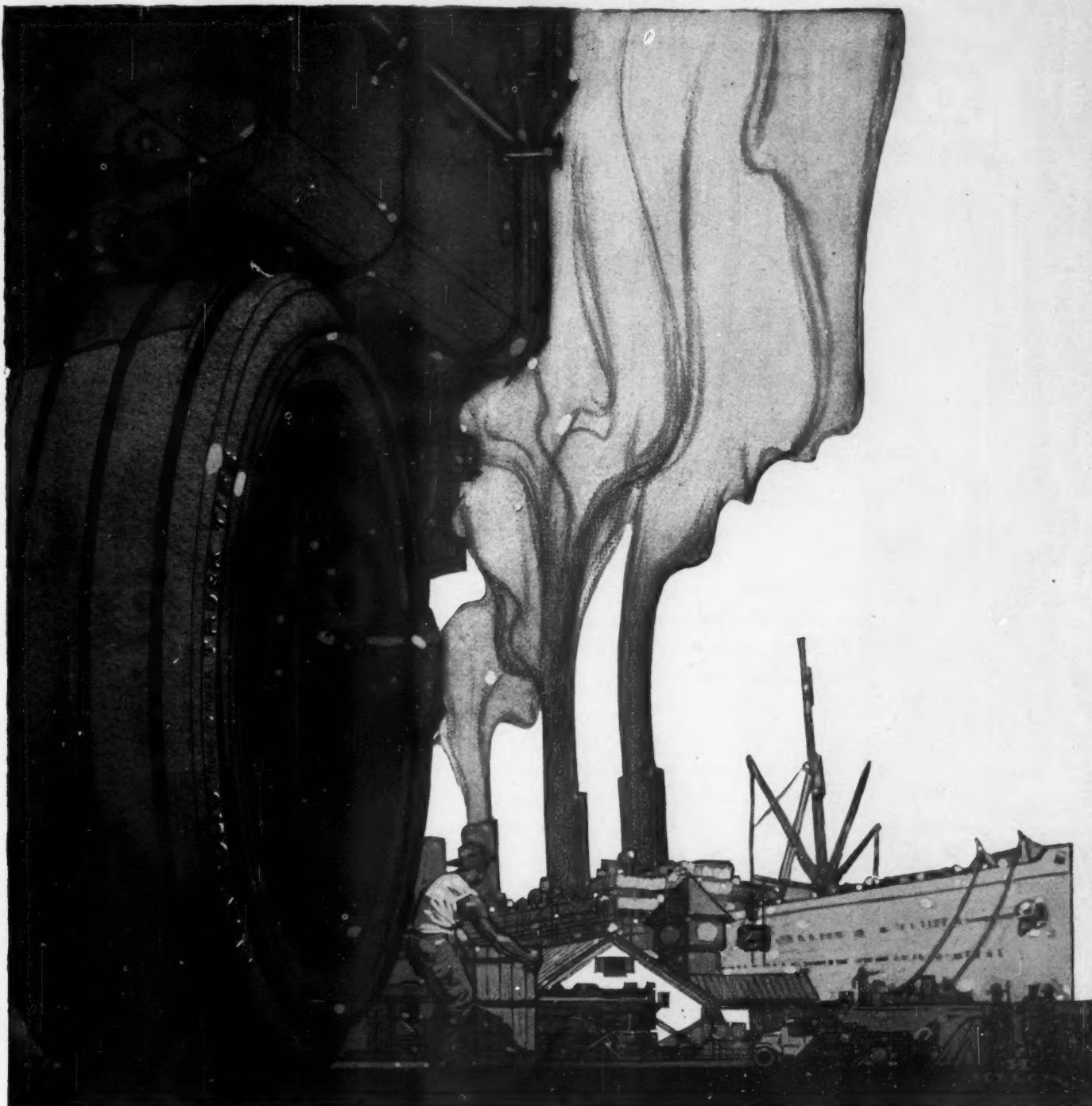
Trucks for the Roads

(Concluded from page 36)

highway department, the Office of Public Roads, is a bureau of the Department of Agriculture. It is doing what it can. But its powers are circumscribed. It has no real authority beyond the collection of data and the dissemination of advice and information upon request, except the small controlling authority over construction in the various states given it for the administration of the federal aid fund of \$75,000,000.

We need, and should have at once, an independent federal highway department, adequately supplied with money, and with broad discretionary powers over its expenditures, and so organized that it could make a thorough survey of the requirements of motor truck transportation and determine what roads should be constructed. By thus correlating the efforts of all of our road-constructing agencies, and being in a position to supply additional funds where needed to augment local finances in order to bring about a uniform, continuous system, such a department would be of the greatest benefit to the country and accelerate tremendously measures for transportation relief.

National authority to determine which roads shall be built and which postponed until after the war, is needed now. The question of diverting labor which might be used for the production of war materials or other essentials to road construction has come up. Here an opportunity is presented for such a federal department as I have suggested, to determine just where and when a certain portion of our available labor can be most efficiently used in providing our needed highways.



SHIPS, a hundred thousand ships should enter and leave our ports this year, to carry men, food and munitions for the Allies.

*"There is now a Fisk Tire
for every motor vehicle that rolls."*

FROM the manufacturer to the trenches the motor truck is constantly playing its part in speeding overseas transportation. SHIPS depend on Trucks—Trucks depend on Tires. Never has quality meant so much!

BRUTALLY strong—built to withstand the greatest demands made upon them—FISK SOLID TIRES faithfully meet every possible requirement of truck service.

WHEN you need Solid Tires—buy Fisk.

FISK SOLID TIRES



At Home

- | | |
|--------------|--------------------|
| Akron | Milwaukee |
| Albany | Minneapolis |
| Allentown | Newark |
| Atlanta | New Haven |
| Baltimore | New Orleans |
| Birmingham | New York City |
| Boston | Norfolk |
| Bridgeport | Oakland |
| Buffalo | Omaha |
| Charleston | Paterson |
| Chicago | Peoria |
| Cincinnati | Philadelphia |
| Cleveland | Pittsburgh |
| Columbus | Portland, Me. |
| Davenport | Portland, Ore. |
| Des Moines | Providence |
| Detroit | Reading |
| Duluth | Richmond |
| Evansville | Rochester |
| Fresno | St. Louis |
| Grand Rapids | St. Paul |
| Harrisburg | San Francisco |
| Hartford | Seranton |
| Indianapolis | Seattle |
| Jacksonville | Springfield, Mass. |
| Johnstown | Toledo |
| Kalamazoo | Utica |
| Kansas City | Washington |
| Little Rock | Waterbury |
| Los Angeles | Worcester |
| Louisville | Youngstown |
| Memphis | |

Representatives in all other cities



NEW YORK or DELHI

The product and organization of the Royal Typewriter Company penetrate to every quarter of the world. People, customs, languages and business methods change as national boundary lines are crossed. But there is one business necessity—the “Royal” Typewriter—symbolic of progress and modernism—that is used everywhere to facilitate intercourse in the business world.

It was inevitable that the “Royal” would be the world’s favorite typewriter; for in this—our own country—home of the “Royal” and the typewriter industry—the “Royal” is the choice of discriminating business men. Growth, such as the “Royal” has enjoyed, can result only from merit.

Wherever a “Royal” user is located there is a “Royal” Typewriter expert nearby. His duty is to see that every “Royal” produces the quality of work of which it is capable and renders service for many years beyond the average life of a typewriter. Cleveland, Antofogasta, Rangoon or Hanoi—the word “Royal” stands for SERVICE—from the typewriter itself and the organization behind it.

ROYAL TYPEWRITER COMPANY, INC.
 MAIN OFFICE 364-366 Broadway, New York
 FACTORY Hartford, Connecticut

ROYAL



Abroad

- | | |
|----------------|----------------|
| London | Antofogasta |
| Stockholm | Cartagena |
| Amsterdam | Para |
| Moscow | Maranhao |
| Copenhagen | Pernambuco |
| Cairo | San Jose |
| Lisbon | Auckland |
| Paris | Mexico City |
| Hanoi | Port-of-Spain |
| Gothenberg | Honolulu |
| Milan | Ancon |
| Shanghai | San Juan |
| Tokio | Havana |
| Zurich | Manila |
| Christiania | Sydney |
| Delagoa Bay | Toronto |
| Khartoum | Montreal |
| Madrid | Winnipeg |
| Samara | Quebec |
| Porto Alegre | Vancouver |
| Medellin | Ottawa |
| Guatemala City | Colombo |
| Montevideo | Delhi |
| Buenos Aires | Rangoon |
| Rio de Janeiro | Penang |
| Lima | Bombay |
| Santiago | Calcutta |
| Valparaiso | Singapore |
| Valdivia | Hong Kong |
| Concepcion | Madras |
| Punta Arenas | Luderitzbucht |
| La Pas | Cape Town |
| Guayaquil | Durban |
| Maracaibo | Port Elizabeth |
| Bogota | Johannesburg |
| Caracas | Malta |

and 17 other important cities

OUR TWO INDUSTRIAL LEVERS

Credit and Transportation Are the Instruments Without Which We Cannot Greatly Perform the Task Before Us

By JOHN V. FARWELL

President, John V. Farwell Company, Chicago

THE great modern pieces of machinery in industry are credit and transportation. To do their part well, they must be both well organized and controlled.

By the establishment of the Federal Reserve system we have obtained the best organization of credit in the world, based on the right foundation and carried on in the most effective manner. Nothing was more fortunate than that the Federal Reserve system was practically in operation when the war began and was very thoroughly a part of the financial fabric of the country when we entered the war.

If this had not been so, we would have gone through troubles and, perhaps, panics, the result of which it is not very difficult to imagine. The Federal Reserve system, however, was planned for peace times and for those ordinary and even extraordinary disturbances which would be caused by calamities then known of. This war exceeds all calamities of history, and has brought on undreamed of conditions.

It is, therefore, absolutely necessary that there should be established a further organization of credit to meet the extraordinary situation which this war has developed, and the War Finance Corporation, to my mind, will answer this purpose.

We know there will be an expansion of credit by means of the War Finance Corporation, but we will have the organization of this expansion, the control of this expansion, and the regulation of it. Therefore, whatever credit is given will go in the direction necessary to win the war, and not in the haphazard way that might have occurred without such regulation. It was a bold, comprehensive and necessary idea, and its effect on industry will be felt at once.

I believe practically every financial authority in the country is glad that the Government did not try to expand the Federal Reserve system to do this extra financial work. It is very important, it seems to me, that that system should not be radically changed and something entirely foreign to its fundamental principles injected into it, becoming an integral part of it, which, after the war, would have to be extracted by what might be called a surgical operation. It is much better to keep this new element in finance entirely separate to begin with, and have it only indirectly connected with the Federal Reserve system. When the war is over and the necessity for it is gone, the Federal Reserve system will not have undergone any organic change in its fundamental principles of lending on bills receivable taken for commodities in the process of manufacture, distribution or consumption.

The other great necessity which I have referred to is transportation. War organization was necessary there. All the governments of the world cannot go on buying commodities and selling securities amounting to billions of dollars without raising the prices of commodities and depressing the prices of securities. In order to sell its own bonds, it was necessary for the Government to organize our industrial elements so that the securities of standard industrial corporations would not be unsalable or worthless.

Railroad securities form the great backbone of the market. If they are stiffened, others are likely to remain firm. The Government saw that and acted. The result is now evident, for confidence has been almost completely restored.

When I say that, I mean the law was satisfactory, and the intent of the Government, as there expressed, seemed fair and just. We must bear in mind, however, that the contract between the Government and the railroads, and the details of how this law is going to be administered, have not been worked out or made public. The Government, I believe, will appreciate the necessity of living up to the spirit and intent of that law, as understood by the people, so that the confidence now already restored may not be rudely disturbed—with disastrous consequences, not only to the railroads, but to all credit, public and private.

It is, however, necessary for the Government to go much further than railroads and to use pressure so as to bring about some relief for all public utilities in order to prevent any of those essential industries from going into bankruptcy or losing their credit. It is unfortunate that the Government cannot directly raise the rates of these corporations, but since it cannot, it seems to me very necessary that the authorities in Washington should do all in their power to see that state public commissions take this action, so that these great industrial organizations will not fail us when their services are needed.

Light, power, heat, and interurban transportation and city transportation are all necessary to win the war. For that reason, it is necessary that their prosperity be maintained. One of the Government's most important problems is to see, as far as it properly can, that all essential industries are kept up to an equally prosperous level, that none of them is allowed to make enormous profits while others droop and die. The body politic cannot remain healthy and strong under such circumstances. If it is not strong in all its parts, we cannot compete with nations which are so organized.

Our Task Only Beginning

I BELIEVE the Government has recently done splendid work, but, if this war is to last for any length of time, it is only just beginning. Every commercial association, business firm and corporation should to its utmost help the Government in bringing about the thorough organization and morale which will win the war.

We are now getting into our stride and more and more into the necessary details. One such element in connection with war finance has been the control of prices in large industries. The Government has undertaken the practical control of some basic necessities, such as wheat and meat products, and also some basic raw materials such as copper, steel, zinc and, to a certain extent, wool.

I cannot quite understand why it has not already taken some measures to control cotton. It is very obvious that in textile matters the thing for the Government to have done, when it entered the war, was to have

bought or contracted for all the wool and cotton it would need for a year or more ahead. The cost to it would have been much less than obtaining its goods in any other way.

The Government has to pay for the goods any way, when they are made, and if it had paid for the raw materials first at a low price, and insisted on manufacturers making them up at a fair price, it would have started at the right end and saved millions of dollars.

Throttle Speculation

THE condition of the textile market today is almost chaotic. A Government committee is endeavoring to make some adjustment so as to regulate prices, but it is said, with some authority, that the Government does not intend to consider the question of cotton. This, it seems to me, is a mistake. It is almost impossible to regulate prices of all cotton goods and comparatively easy to control cotton. We should at least get hold of what cotton and cotton goods and wool and woolen goods we want for Government purposes at reasonable prices and take some drastic steps to stop pure speculation, both in cotton and staple cotton goods.

A great many people who are not in the cotton business have bought cotton; and people who are not legitimately in the cotton goods business, and have no regular outlet, have bought cotton goods on speculation.

"What is and will be the effect of Government control on industries through Government financing or otherwise?" In nearly every case the effect has been good, and will be good during the period of the war. The danger, it seems to me, is in the after-effects. The difficulty will be in the process of getting rid of Government control and getting back to normal again.

There may be now, for instance, too much standardization, which in the army has been called "red tape." We know too much standardization crushes out initiative and invention, and the line should be carefully drawn, so that this country will get the benefit of economy through standardization and yet not lose more through the elimination of private initiative and invention.

This is not the time, perhaps, to go into the important questions arising between capital and labor, which are being solved now very satisfactorily for the period of the war, but which may require some new solution when the war is over. We should all try to shape public opinion so that capital and labor will see clearly what their part is now and what it is going to be when the war is over.

We shall probably need more cooperation and profit-sharing and less limitation of production and opportunity to learn a trade than we had before the war, and a larger representation of labor in the control of our industries. The country which works out these problems best in this great world question will win in the economic competition.

Our Government will have to be broad and constructive, and the Chamber of Commerce of the United States will have a large part in helping to define and decide these new relations between the Government and business, and also those between capital and labor.



ALL OVER THE UNITED STATES

rings the appeal to save, willingly sacrifice and be **THRIFTY**. The largest part everyone can play over here is little in comparison with the smallest part played by anyone "over there."

IN millions of homes throughout the United States, the habit of thrift has been firmly established since the first lesson taught by the famous **24c** Green Stamps back in 1896—a lesson learned not at a little red school on a hill top, but at the important, though small, general store at the "cross roads."

IT is easy for the millions of **24c** Stamp collectors to practice thrift—to continue a habit is always easy. These famous tokens blazed a safe and sure trail—a trail of thrift anyone may follow.

The Sperry & Hutchinson Co.
2 West 45th St. New York City

War Legislation—In Great Volume It Comes

Reorganization of Government Departments, Bond Issues, Loans to Allies, Financial Help for Industries Important in the Prosecution of War, These and Questions of Shipping, Enemy Activity in the United States, and the Like Engage Attention of Congress

WAR legislation continues to come forward in great volume. If Congress could devote its attention to nothing else it would be well occupied for months. In point of fact, it has to deal with the great supply bills, which will provide the twelve billion and more in money that is to be spent in the year which begins on July 1. Even so, the first surmises about adjournment of the session, which in recent years have invariably proved too optimistic by at least three months, refer very tentatively to July.

Taxes

OF course, consideration of adjournment at such a date is incompatible with enactment of new taxes and revision of the text of the present law levying on incomes and excess profits. In fact, there has been suggestion that legislation of this kind should be postponed until next winter. Such postponement, however, would probably mean no legislation in this Congress, since the scant three months between December 3 and March 4 scarcely allow enough time for the inevitable programme of appropriation bills, let alone opportunity for debates on taxation. Until the Treasury Department can put before committees of Congress definite estimates, such as are now being collected from the returns that have been made, for the results of existing taxes, the final decision about revenue legislation in this session will probably not be made. Then, too, the Department will in all likelihood indicate its final attitude toward pending proposals for opportunity to pay taxes due in June by instalments over the second half of the year.

Reorganization of Departments

THE Overman bill, conferring authority upon the President to reorganize and consolidate government agencies, has been the Senate's unfinished business since March 28. On April 18, however, progress had been made only to the extent of an agreement that after April 24 no Senator should speak longer than thirty minutes on the bill, or twenty minutes on any amendment. After the Senate passes the bill it must go to the House for consideration, but the House, of course, has ways of expediting legislation which it wants to pass.

Recent Enactments

THAT progress is being made in this session new laws approved by the President bear testimony. Express legislative approval of cooperation in export trade was given on April 10. The third bill in a year authorizing issues of bonds and Treasury certificates, and loans to Allied governments, became law on April 5. On the same day the War Finance Corporation was created, to assist in caring for the financial needs of industries which are important for the support of war. Heavy penalties have been provided for persons who attack property in the United States in the interest of the enemy. Authority was given on March 28 for the Government to acquire the piers of German steamship companies at New York, and for the Alien Property Custodian to act as a common-law trustee in disposing of assets that come into his hands, with a proviso that he may sell only to American citizens. These measures indicate the importance of the war legislation that

is pressing forward. Much of it has for its purpose a gradual extension of Government control over industries, supplies of materials, and transportation. Other bills provide means for reinstating in useful activities the men in our armed forces who suffer serious injury.

Shipping

OCEAN transportation necessarily occupies an important place in the legislative branch of the government as in the executive. That the situation with respect to ocean tonnage is acute is admitted on all hands. One-third of the world's carrying capacity by sea has been diverted to military purposes. The resulting situation is clear, for instance, with respect to food. Of food material there is an abundance accessible to the seas, according to the Food Administrator, but shipping conditions require that the Allies in Europe, and all our forces in France, use only the nearest sources. Roughly, every 5000 tons of food for Europe requires 15,000 tons of shipping from Australia, 10,000 tons from Argentina, and 5000 tons from North America. The conclusion about the source to be used is obvious.

War-risk insurance has been written by the Government only on American vessels and on cargoes carried by them. Proposals brought forward in the House at the end of March would allow government insurance on a vessel under a friendly foreign flag and chartered to Americans and on American cargo on a foreign vessel.

The Shipping Board's powers are likely to be enlarged. During the week of April 15 members of the Board urged amendments to the Shipping Act of September, 1916. They seek enlarged authority for requisition and control, power to take over port and terminal facilities, ability to govern ocean-freight rates, and the like. In connection with the bills that have been drawn, and which the House Committee on Merchant Marine is considering, it is proposed to follow the precedent set by other countries, by requiring that a corporation which seeks American rights in connection with merchant vessels must be American in substance as well as in form; actual voting control of the stock of a company organized in the United States must be in the hands of American citizens and must be free from beneficial interests or obligations which might impair the voting privilege.

Compensation for injuries received by officers and crews on board ship is proposed in a bill which was introduced in the Senate on April 12. This bill would allow recovery in the federal courts, including, in case of death, a recovery on the part of a dependent person. For years the American Bar Association has sought legislation which would abrogate the old rule, already discarded on land, that there can be no recovery of damage when an employee in a vessel is killed through fault of the employer. The present bill would allow a dependent, under such circumstances, to recover a sum equal to wages for three years, and for injuries not resulting in death would provide indemnities.

Last May the Supreme Court held that longshoremen could not recover for injuries under state compensation statutes, on the ground

Office Machinery and— Winning the War

It is the patriotic duty of every American business man to short-cut and reduce costs.

To conduct a business with a reduced force is to cooperate with the Government in the greatest task that has ever confronted this Nation.

Conserving man-power is part of the procedure for winning the war. Lessening the work by short-cutting relieves the demand for clerical help and makes men available for places where they are most needed.

Releasing men for military service is highly essential. But just as vital is providing men for backing up those in active service. For every man "over there," two or three men must be at work over here. And the importance of the men behind the men in service cannot be over-emphasized.

Consider the saving of just one kind of office appliance in the Peoples Gas Light and Coke Company, Chicago. If it were impossible for them to install this particular labor saving device they would require 75 more clerks than they have at present.

Even if they could get the 75 clerks, they would be depriving the Government of men for the tremendous organization backing up the Pershing army. They would have to take clerks from other channels of necessary occupation in these war times.

Can we afford this year to waste even one day of a clerk's time by allowing him to do work that could easily be handled by some office appliance?

The firm mentioned joins with thousands of other American business houses in answering "No," and to back it up they keep their labor saving devices working to capacity. Short-cut methods release great armies of men for other work.

Such patriotism in business would be impossible without office machinery for conserving labor.

The Addressograph Co.
TRADE MARK
PRINTS FROM TYPE

902 W. Van Buren Street, Chicago



MERCURY TRACTORS

are
investments
which pay heavy
dividends not only
in actual cash but
thro' the savings
in labor they ef-
fect in industrial
haulage.

"We know

The Trackless Train

has replaced
six men,"

writes one manu-
facturer, and his
experience is not
unusual. Others
can testify to sav-
ings of 10 men or
even more.

Such an invest-
ment merits most
serious considera-
tion—is worthy
of investigation.

Write Dept. R
for

"On Government Business"

Mercury

Manufacturing Company
4110 So. Halsted Street
CHICAGO U. S. A.



that their occupation was within a sphere re-
served by the constitution to federal jurisdic-
tion. In October a bill was enacted which, as
a matter of federal legislation, attempted to
save for such persons any rights or remedies
under state statutes.

The different questions about merchant
shipping that come before Congress make it
clear we have returned to the sea.

Metals

OUR gold holdings have mounted upward,
and as in other belligerent countries they
are conserved in all possible ways, that they
may afford a basis for our credit. At the
same time we have a great store of silver,—
more than the whole production of the world
for two years. It is in the form of 490,800,000
silver dollars, amounting to 375,000,000
ounces of silver, against which \$450,000,000
in silver certificates are outstanding.

At a moment in world affairs when China
and India want silver in exchange for their
products, and when production of silver is
curtailed in such countries as Mexico, our
store becomes highly valuable as a source
from which China and India may be paid.
On April 18 the Senate passed a bill which will
allow melting of 350,000,000 of these coins,
with a proportional cancellation of silver cer-
tificates and with federal reserve bank notes,
issued against bonds or Treasury certificates,
taking their place in circulation. The bullion
obtained in this way would be sold by the
government for use in making payments in
the Orient, and also for meeting the require-
ments of allied governments for silver coinage.

At the same time, miners of silver will join
growers of wheat in having a guaranteed price
fixed for their product; for the Government
would replace the bullion it now uses for meet-
ing trade balances with the Orient by pur-
chasing silver at one dollar an ounce. An-
nouncement of this guarantee was sufficient
to cause the market price of silver to rise from
around 91 cents to 99. Even so, some miners
point to the price of last autumn, around
\$1.18, and the joint action of England and the
United States in bringing it down.

Other Metals

SILVER is not alone in having Congressional
attention in war legislation. Moreover,
this attention does not minimize the increase
in production we have attained in metals and
essential minerals. Since 1914 we have
doubled our output of aluminum and zinc,
raised our production of copper by 50%, of
lead by 40%, and of iron by 25%. Our an-
nual tonnage of these five metals has risen
in three years by 10,000,000, and more than
fills our requirements.

That is not the whole story of achievement.
We are now producing 10% of our normal re-
quirements in potash. Whereas we used to
mine 10,000 tons of magnesite a year to make
refractories for our furnaces, we got at home

last year 310,000 tons. Of manganese, which
is essential in steel making, we produced 4000
tons in 1914 and 120,000 in 1917; this year we
may reach 240,000.

That we need 800,000 tons of manganese in
a year indicates how far we have yet to go in
developing our own resources. The propor-
tions of our needs produced in the United
States during 1917 are approximately:

Antimony	10%	Molybdenum	100%
Arsenic	60	Mercury	120
Bromine	100	Platinum	13
Chromium	37	Pyrites	33
Abrasives	90	Sulphur	105
Graphite	25	Tin	1½
Magnesite	99	Tungsten	65
Manganese	23		

The purpose of a bill reported to the House
of Representatives on April 15 is to encourage
production of these essential materials within
the country, and thus release for other war
uses ocean tonnage heretofore required for im-
ports. Manganese used to come from India.
Interference with ocean trades caused Brazil
to be our great source, yielding 600,000 tons
last year. The Shipping Board now wants to
divert half the ships that brought us manganese
ore from Brazil in 1917. Ships which carried
pyrites from Spain can be used for other pur-
poses, if a plan for developing 300,000 tons a
year in the Middle West succeeds. Cali-
fornia is expected this year to raise its pro-
duction of chromium ore,—urgently needed
in steel-making,—from 36,000 tons to 44,000,
thus conserving vessel capacity from Mada-
gascar and Ceylon to the amount of 8000 tons
this year. In all, the Shipping Board hopes
to save between 300,000 and 400,000 dead-
weight tons in 1918 if domestic production of
minerals we have been importing can be
stimulated to the extent experts consider
possible. The restrictions on general imports
already announced are computed to save
500,000 tons. Such a saving is small when
compared with the 6,000,000 tons England
conserved last year with its limitations on
exports and imports of all kinds.

In order to stimulate production of the
"minor" minerals,—i. e., minor in quantity,—
the pending bill will authorize the President,
as a means of encouraging production, to
guarantee minimum prices for two years, and
to buy and sell in order to give effect to the
guarantee. As a last resort, he may com-
mandeer a mine or smelter that is held out
of use through litigation or similar cause.
Besides, in order to insure conservation, he
can place both production and use under
license. In this connection he could curtail or
prohibit some uses, such as platinum for
jewelry and tin as a container for dry sub-
stances like tobacco. For administration
\$500,000 would be appropriated, and a fund of
\$50,000,000 would be created as capital for
governmental purchase and sale of the
minerals to which the bill refers.

Business Registers "Speed"

The Record Is One Not Merely of Things Intended but of Things
Being Done

COMMERCE and industry are gaining
tremendously in momentum. What
that momentum will finally be when
full speed is reached, no man, perhaps,
dare venture to predict.

To the man who studies, even casually, the
work of the Sixth Annual Meeting of the Na-
tional Chamber of Commerce in Chicago last
month, however, one fact comes out in start-

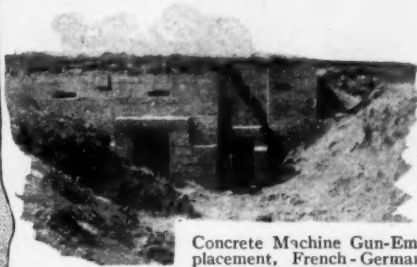
ling relief. That is that many things which
went into the resolutions passed by the War
Convention of American Business in Atlantic
City last fall may have seemed at that time
new and strange and even revolutionary; and
that those same things, and others far more
drastic, were taken absolutely for granted in
Chicago.

The shot fired at Atlantic City has landed.

Concrete on the Firing Line

in France

in Italy



Concrete Machine Gun-Emplacement, French-German Battle Front

This is a war of steel and concrete—the former for destruction, the latter for conservation of men and resources. On the battle front in Europe concrete machine gun emplacements, concrete trenches, concrete gun foundations, concrete barges on which heavy naval guns are mounted, are doing their part to help hold back and beat the enemy.



Italian Concrete Barge with Naval Gun on Piave River, Italian Battle Front

Everywhere in America

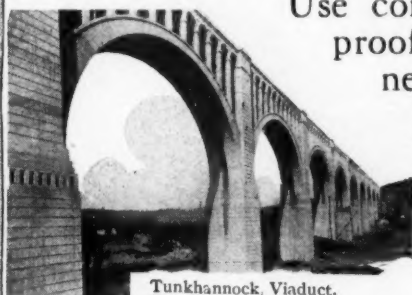


Multiple Arch Reinforced Concrete Dam near San Diego, Cal.

Concrete is backing up concrete on the firing line—in power plant and aqueduct, on farm and public highway, in warehouse and factory—it is increasing and conserving production and labor.



28-Mile Reinforced Concrete Pipe Line, Sooke Lake Aqueduct, Victoria, B. C.

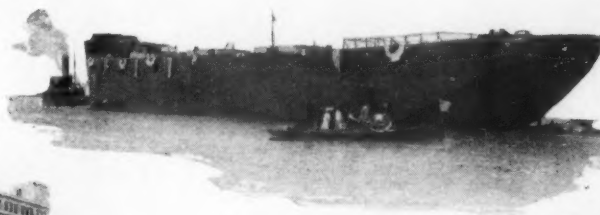


Tunkhannock, Viaduct, Delaware, Lackawanna & Western Railroad

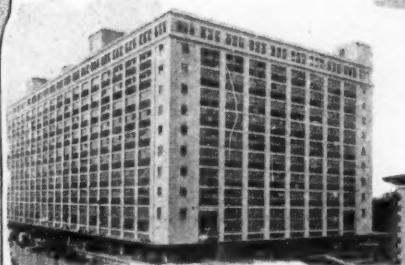
Use concrete because it is rotproof, rat-proof, floodproof, fireproof—permanent. It makes for economy in **production, conservation and transportation**. It consumes nothing. It adds to the permanent wealth of the nation.



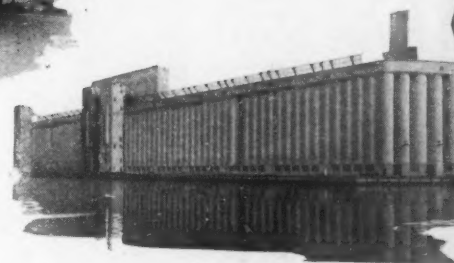
U. S. Army Truck Train on Concrete Road "Somewhere in America"



7900-Ton Reinforced Concrete Cargo Steamship Faith, Largest Concrete Vessel Afloat



Reinforced Concrete U. S. Government Warehouse



5,000,000-Bushel Reinforced Concrete Grain Elevator

PORTLAND CEMENT ASSOCIATION

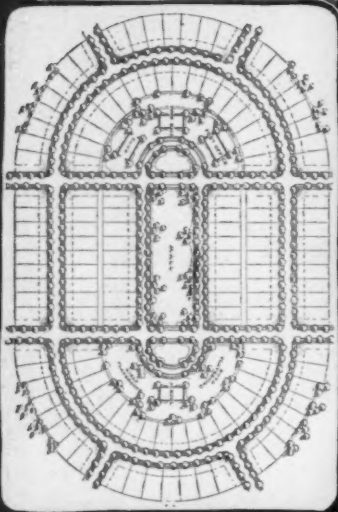
Offices at

ATLANTA	DALLAS	HELENA	KANSAS CITY	MINNEAPOLIS	PARKERSBURG	SALT LAKE CITY	SEATTLE
CHICAGO	DENVER	INDIANAPOLIS	MILWAUKEE	NEW YORK	PITTSBURGH	SAN FRANCISCO	WASHINGTON, D. C.

CONCRETE FOR PERMANENCE

Industrial

A Complete City



ALADDIN CITIES

Aladdin Cities are the result of a careful research work into the necessities of modern civic life. Every necessity which makes for health, comfort, hygiene and expansion is included in these plans. Each city is complete and specifications include complete materials for homes of different sizes, churches, schools, public service buildings, such as stores, offices, hotels, banks, etc., all materials for water and sewerage distributing systems, electric service and generating plant, all materials for landscape work, gutters, curbing, sidewalks, etc.—in short, complete materials for each city.

Quick Shipment→
Quick Results→
Service Plus→



The Aladdin Co.

64 Aladdin Ave.

HOMEBUILDERS TO THE NATION—TOWNBUILDERS TO THE NATION
Canadian Branch, The Canadian Aladdin Co., C. P. R. Bldg., Toronto, Ont.

Bay City, Mich.

Housing

-Or A Single-Home



A Train Load of ALADDIN Houses Per Day

Depending upon size of house, we load from one to three complete houses in each car. Normally, shipments arrive at Atlantic Coast points in about six days after leaving our mill.

A Gang of 120 Men Can Erect 10 ALADDIN 5-Room Houses Per Day

Aladdin Houses are Read-Cut. Every piece of material, joists, studs, rafters, sheathing, siding, flooring, interior finish, is cut to proper size, marked and numbered and ready to nail in place.

Immediate Action On Any City Project— or Any Housing Problem

Our plans are drawn, prepared and finished for cities of from 300 to 3,000 population. Experienced town planners, landscape architects, engineers and builders have spent months of study and work in their production. This service becomes a part of every Aladdin Housing transaction—a single house or a complete city.

Over One Thousand Aladdin Houses Carried in Stock

All lumber, shingles, lath, millwork, siding, flooring, interior finish, plaster, hardware, paints, nails, are carried constantly in stock, ready for instant shipment.

Hundreds of American Corporations Have Built Aladdin Houses

As many as five hundred Aladdin houses have been sold to a single corporation. Re-orders are constantly received from corporations who have tested our houses by actual purchase and erection.

A Million Dollar Specialized Plant for Manufacturing Standardized Houses

The Aladdin plant is the first specialized plant designed and built for manufacturing standardized frame houses. And it is the largest of its kind in existence.

A Single House—or A Complete City

The Aladdin Company will quote you a definite price on a single house or complete cities of 300, 500, 600, 1,000, 1,500, and 3,000 population. These cities are now listed in our book on Industrial Houses. Cities include homes, stores, churches, schools, municipal buildings, water distributing systems, electric light plants and distribution, sewerage systems, trees, etc.

"Book of Aladdin Homes" No. 6 with full information, floor plans and prices will be mailed on request. Aladdin book "Industrial Housing" mailed only to inquiries written on business or official stationery.



The Aladdin Co.

64 Aladdin Ave.

HOMEBUILDERS TO THE NATION—TOWNBUILDERS TO THE NATION
Canadian Branch, The Canadian Aladdin Co., C. P. R. Bldg., Toronto, Ont.

Bay City, Mich.

Structural Strength is essential to permanent Security



Anchor Post Fences

Drive Anchors

Now that you have decided on a woven steel fence for protecting your factory which fence will you choose to protect your investment?

Naturally the one of greatest structural strength. That is an

ANCHOR POST FENCE of Chain Link Woven Steel

For one reason because the drive anchorage is an exclusive feature of Anchor Post Fences. The post is driven into the ground and then held rigidly erect by two steel stakes driven diagonally through slots clamped to the sides of the post. Frost and thaw will not disturb it or throw it out of line.

The first Anchor Posts erected over twenty years ago still stand as a testimonial of their great structural strength and durability. Our Catalog describes in detail our complete line and service.

ANCHOR POST IRON WORKS

167 Broadway, New York

PHILADELPHIA CLEVELAND BOSTON
HARTFORD ATLANTA

That is evident. American Business is awake and aroused, and it is now doing what last fall it had merely resolved to do. The issue now is no longer academic—it is a matter of processes actually going forward.

That is the reason why the resolutions passed in Chicago are worth, not casual reading merely, but thoughtful study. That is why no student of events can read them without asking in his mind how far from possible would many of these pronouncements have been two years ago, when the promise of a new order was showing dimly, like the first faint streaks of dawn.

As a yardstick wherewith to measure how fast and how far we have traveled, this record, as expressed in the resolutions, could hardly be excelled. Here it is, in sharp, clear outline:

Declaration of Principles

WHEREAS, The close of the first year of America's participation in the great struggle for the security of democracy finds American business men with a clear conception of the immensity of the struggle in which we are engaged, the scope and character of the sacrifices required; and

WHEREAS, Out of this knowledge has grown and deepened a resolution to be all and do all necessary to achieve success in this mighty struggle; and

WHEREAS, The Chamber of Commerce of the United States at its war convention in Atlantic City pledged "our government its full and unqualified support in the prosecution of the war until Prussianism is utterly destroyed;"

NOW, THEREFORE, BE IT RESOLVED, That this convention renews the pledge of American business then made and re-dedicates its energies, its facilities, its resources, and its united efforts to meet any demand however great that may be made upon it, in order that it may continue to loyally sustain our government and our fighting forces in the struggle to save the world.

Hostile Acts

WHEREAS, The many attempts to destroy munitions and other property, public and private, by incendiarism, explosives, sabotage, and in other ways which hamper the concentration of the nation's force for the winning of the war, menace life and threaten domestic tranquility, call for drastic repressive measures; and

WHEREAS, Those who plan and perpetrate these outrages understand and fear only the strong hand;

THEREFORE, BE IT RESOLVED, That we urge all branches of the United States Government, legislative, executive and judicial, by tireless vigilance, rigorous enforcement, relentless pursuit and prosecution, and severe penalties, to visit (to the full limit) stern and prompt punishment upon all persons found guilty of such acts whether they be alien enemies abusing hospitality and presuming upon the national patience, or traitors dishonoring their citizenship.

Reaffirming the Action of the Chamber with Respect to Universal Military Training

WHEREAS, The importance of adopting the principle of universal military training was recognized by the Chamber of Commerce of the United States in 1915, and at the Fourth Annual Meeting in 1916 was approved for a referendum by the constituent members which resulted in an overwhelmingly favorable vote; and

WHEREAS, The experience of the last two years has shown the grave danger and the great cost of the nation's unpreparedness, particularly through its inability promptly to place a large, effective force in the field;

WHEREAS, The training camps have demonstrated their great value, first, to the men through increasing their physical strength, mental alertness, self-control and experience; second, to the nation through better qualifying its citizens for their mutual responsibility toward each other and for the defense of their liberty;

THEREFORE, BE IT RESOLVED, That the Chamber of Commerce of the United States again reaffirms its confidence in universal military training, not only as a policy essential to the adequate progress and security of the nation in times of peace, but that at this serious period it is imperative to strengthen and prepare all young men for the great efforts which they may be called upon to make for posterity;

RESOLVED, further, that the supreme importance of early action to secure universal training in this country be again brought to the attention of the membership for consideration and such steps as seem appropriate.

Liberty Loans

WHEREAS, Winning the war is the most important business of every business man, taking precedence over all activities of every nature; and

WHEREAS, The vigorous and successful prosecution of the war requires, and will continue to require, large sums of money, making necessary, in addition to sums raised by taxation, the selling of government bonds;

THEREFORE, BE IT RESOLVED, That the Chamber of Commerce of the United States of America urges the business men of the nation to continue the same untiring work in the selling of the third issue of Liberty Bonds, as well as subsequent issues, as they so patriotically devoted to the previous issues, thereby insuring a substantial over-subscription to the present and future issues so necessary to provide adequate finances for our government's use, and as a demonstration to the whole world of the fact that our people are back of the government's war programme to the limit of their financial resources.

War Savings Stamps and Thrift Stamps

WHEREAS, War Savings stamps and thrift stamps have been issued in accordance with legislative enactment of the Congress for the purpose of raising revenue for war purposes; and

WHEREAS, These stamps afford an opportunity to every man, woman and child throughout the country to invest in government securities in small amounts, and thereby do his or her part in helping to maintain our boys at the front; and

WHEREAS, The continued investment in these stamps encourages the habits of saving and thrift so important to the welfare of our people and our nation during the present emergency and for the future;

THEREFORE, BE IT RESOLVED, That the Chamber of Commerce of the United States urges the business men of the country to take a personal interest in the work of forming local savings clubs and doing all such other things as may be possible to encourage the widest participation in this form of individual investment.

War Chests

WHEREAS, The time has arrived when it is evident that in the interest of unity and for the prevention of fraud and duplication of effort efficient and business-like methods should be adopted for the work in various communities throughout the country for raising funds in behalf of agencies engaged in legitimate war relief;

THEREFORE, BE IT RESOLVED, That the Chamber of Commerce of the United States recommends to its constituent members that they use every effort to coordinate such work and to adopt and put into effect at once in their various communities such plans of cooperation as seem most desirable.

Ship Building

WHEREAS, The present critical aspect of the war renders imperative the utmost contribution of men and supplies from the United States toward the common cause;

WHEREAS, The extent of this contribution depends first of all upon ship tonnage, since no amount of men or supplies can be effective unless transported; and

WHEREAS, In view of these facts, the Chamber of Commerce of the United States desires to express its conviction that it is the first duty of the business men and business organizations of the country to do all in their power to assist the Government's efforts to speed up ship building;

THEREFORE, BE IT RESOLVED, That the Chamber of Commerce of the United States earnestly recommends to all business organizations, all business men and all other citizens in communities where ships are being built or ship parts being produced, that the private interests of all citizens and the normal interests of business organizations be made secondary to the business of aiding ship production during these critical months;

RESOLVED, That it be recommended to all local business organizations that they take such steps that the ship yards shall have first call upon the best labor and executive ability available in their respective communities, so that in this crisis it cannot be said that private business has better skilled labor or executives than shipyards;

RESOLVED, That it be recommended to all local business organizations to organize themselves for definite assistance to the ship builder, or producer of ship parts, in the solution of the problems of housing, local transportation, education, amusements, and other related problems that center in and around the ship yards, thus freeing the time and energy of the shipbuilder for the greatest possible concentration upon his sole task of ship construction;

AND BE IT FURTHER RESOLVED, That the programmes of work and assistance suggested above be perfected in frequent meetings at which organizations and individuals may confer with shipbuilders, learn their needs, and work out an agreement upon the best way to help.

Concrete Ships

WHEREAS, The Emergency Fleet Corporation has requested Congress to appropriate fifty million dollars for the immediate construction of concrete ships; and

WHEREAS, The need for ships for ocean transport is urgent and critical and must be met quickly by providing ships of all types; and

WHEREAS, Concrete ships can be built quickly of materials readily available, the use of which materials will not interfere with other war needs, and with labor that is obtainable and not likely otherwise to be used in ship construction and with but little preliminary work necessary to provide the plant for the construction of such ships;

NOW, THEREFORE BE IT RESOLVED, By the Chamber of Commerce of the United States that the Congress of the United States be urged to approve this appropriation without delay.

Sherman-Clayton Acts

WHEREAS, The national government has found it necessary for the successful conduct of the war to adopt an economic policy of regulated, concerted action in fields of production and distribution of the nation's necessities; and

WHEREAS, To this end the national government has invited its citizens to cooperate with it in every manner to conduct the economic life of the nation according to this principle; and

WHEREAS, This principle of constructive regulated concert of economic action is now often apparently in conflict with the federal laws known as the Sherman and Clayton Acts, which require compulsory competition in principle;

NOW, THEREFORE BE IT RESOLVED, That the Board of Directors of the Chamber of Commerce of the United States is requested to consider the appointment of a special committee to prepare a referendum on the question of requesting Congress

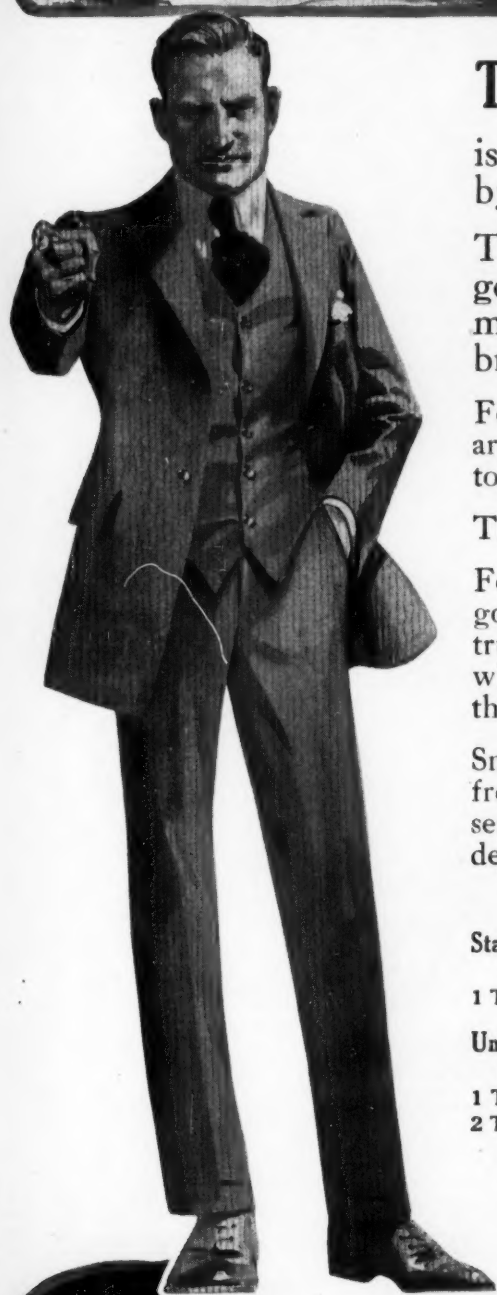
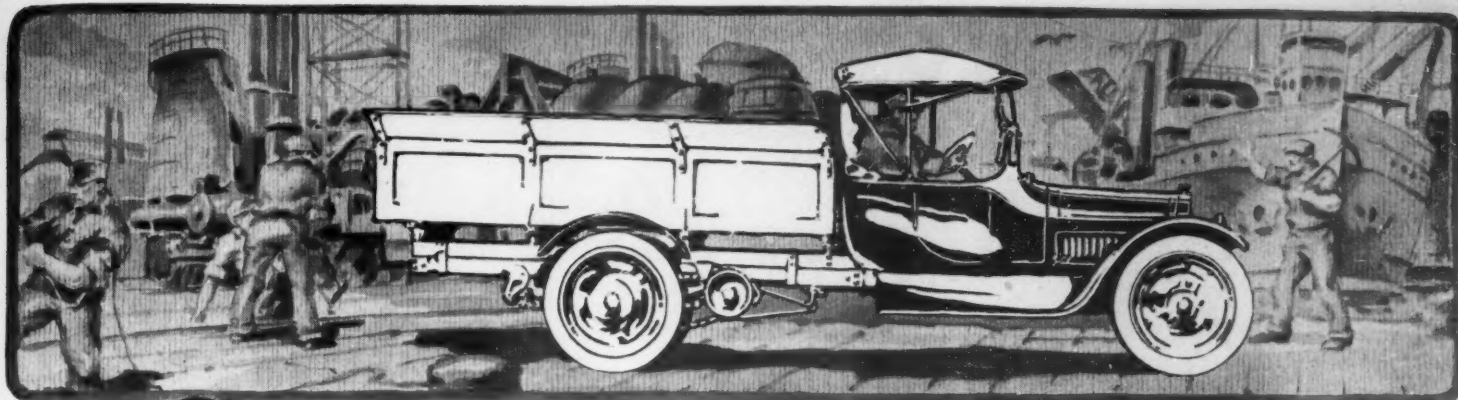
(A) To examine promptly the whole situation (including the Federal Trade Commission Act) from both the national and international standpoints; and

(B) Either to amend promptly or replace existing laws with clear, reasonable and adequate new legislation.

Government Control

WHEREAS, Under existing conditions there is naturally a growing tendency for governmental control of industries;

THEREFORE, BE IT RESOLVED, That the Chamber of Commerce of the United States respectfully urges upon the various departments of the United States Government, and upon Congress, that measures or proposals which have for their object the control of industries be subjected to close scrutiny and examination, and that such proposals be adopted only where there is sufficient evidence indicating



The United States Chamber of Commerce

is urging every one to move as much tonnage as possible by motor trucks.

This is in order to ease the present railroad freight congestion, which, according to authorities exists, not so much because of car shortage but because of a condition brought about by inadequate terminal facilities.

For miles and miles out of every large city thousands of freight cars are standing days—even weeks—waiting to get into the terminals to be unloaded.

The timely solution of this condition is the motor truck.

For example: In an Iowa town the merchants were unable to secure goods by freight and, as a remedy, they jointly purchased a motor truck. Daily trips were made to Des Moines, forty-five miles distant, where the goods were transferred directly to the truck, and laid down that same evening in the stores of the joint owners of the truck.

Smith Form-a-Truck is already playing a big part in relieving the freight congestion. There are more than 30,000 SMITHS in use—serving every conceivable line of business, all proving their absolute dependability and economy in daily service.

Standard Attachment for Ford cars

1 Ton . . . \$390

Universal Attachment for all other cars

1 Ton . . . \$450

2 Ton . . . 550

F. O. B. Chicago

Hundreds of nationally known concerns own Smith Form-a-Trucks. Among more prominent users are:

Standard Oil Company
Indiana Refining Company
Armor & Company
Swift & Company

Colgate & Company
Fels Naphtha Company
Arbuckle Bros.
Sherwin-Williams Company

Smith Form-a-Truck has helped men in your line of business. It can help you. If you are interested send for our booklet "Solves the Delivery Problem."

SMITH MOTOR TRUCK CORPORATION, CHICAGO

Smith

Form-a-Truck

DURAND Steel Lockers



Type L. S.

YOUR employes will appreciate an equipment of Durand Steel Lockers.

You owe them a cleanly, sanitary, safe place for the protection of their clothing.

Durand Steel Lockers are fire-proof, practically indestructible, and easily cleaned. They will form a permanent asset to your plant, and will promote order and efficiency.

Write today for catalogue.

We are also manufacturers of steel shelving, steel bins and general steel factory equipment

DURAND STEEL LOCKER CO.

1511 Ft. Dearborn Bk. Bldg. 911 Vanderbilt Bldg.
Chicago New York



Make that farm of yours pay more. Equip it with better implements backed by a better knowledge of how to use them. Write for our big book, mentioning "The Nation's Business"

Deere & Company, Moline, Illinois

that the state of war makes such control more effective for the proper conduct of the war.

Public Utilities—Maintenance

WHEREAS, The maintenance of the country's public utilities in the highest possible state of efficiency is essential not only to the war programme of the United States but also to the nation's business, industrial and public interests; and

WHEREAS, Such efficiency depends upon the preservation of the credit of the companies providing public utility service; and

WHEREAS, The increase of costs and the unusually onerous conditions of operation brought about by the war seriously threaten the ability of the public utilities to continue the furnishing of the necessary services they perform; and

WHEREAS, The protection of the credit of public utilities is very largely in the hands of regulatory commissions and other public authorities, rather than in the utilities themselves;

NOW, THEREFORE, BE IT RESOLVED, That the Chamber of Commerce of the United States recommends to state and local authorities that they recognize the unusual and onerous conditions with which public utilities are contending, and that in the interest of the nation, of business, and of the public they give prompt and sympathetic hearing to the petitions of such utilities for assistance and relief.

Undertakings Not Essential to War

RESOLVED, That the Chamber of Commerce of the United States endorses the resolution adopted by the War Industries Board, and urges upon its constituent members their cooperation with the principles declared therein. The resolution of the War Industries Board is as follows:

WHEREAS, It has come to the notice of this Board that new industrial corporations are being organized in different sections of the United States, for the erection of industrial plants which can not be utilized in the prosecution of the war; and

WHEREAS, Plans are being considered by certain states, counties, cities and towns for the construction of public buildings and other improvements which will not contribute toward winning the war; and

WHEREAS, The carrying forward of those activities will involve the utilization of labor, materials and capital urgently required for war purposes;

NOW, THEREFORE, BE IT RESOLVED, By the War Industries Board that in the public interest, all new undertakings not essential to and not contributing either directly or indirectly toward winning the war, which involve the utilization of labor, materials and capital required in the production, supply or distribution of direct or indirect war needs, will be discouraged, notwithstanding they may be of local importance and of a character which should in normal times meet with every encouragement.

BE IT FURTHER RESOLVED, That in fairness to those interested therein, notice is hereby given that this Board will withhold from such projects priority assistance, without which new construction of the character mentioned will frequently be found impracticable, and that this notice shall be given wide publicity, that all parties interested in such undertakings may be fully apprized of the difficulties and delays to which they will be subjected and embark upon them at their peril.

Regulation of Exports Through Licenses and Permits

RESOLVED, That the Chamber of Commerce of the United States heartily approves the following preambles and resolutions of the War Industries Board and urges conformity therewith upon the part of all of its constituent members and upon industry generally throughout the country:

WHEREAS, It has come to the notice of the War Industries Board that orders have been and are being placed for the production and delivery in the United States of materials, equipment and supplies intended for export, either actually or nominally to neutral countries, but for which no export licenses will be issued during the war; and

WHEREAS, Many of the products for which such orders are placed are manufactured in accordance with special designs and specifications, rendering it impossible for them to be utilized to advantage or at all in this country; and

WHEREAS, The said materials, equipment and supplies are being stored for export at the termination of the war; and

WHEREAS, This practice results in the utilization of materials and labor urgently needed for the production of the war requirements, direct or indirect, of the United States and the Allies;

NOW, THEREFORE, BE IT RESOLVED, by the War Industries Board that the practice here mentioned is to be deprecated and should be discouraged.

BE IT FURTHER RESOLVED that the industries of this country be requested to accept no order for the manufacture of and to make no contract of sale and to make no sale or delivery of any materials, equipment or supplies intended for export until the proposed purchaser has first procured from the War Trade Board an export license or from the War Industries Board a permit to make such purchase.

Essential Industries

WHEREAS, It is important for the maintenance and operation of industries essential for the conduct of the war and the welfare of the public interest that public announcement of their importance be made.

BE IT THEREFORE RESOLVED, That the Chamber of Commerce of the United States requests that the War Industries Board, or such other governmental body as is authorized to do so, declare what industries are essential for the conduct of the war as rapidly as they feel justified in making such declaration.

War Revenue and Tax Laws

RESOLVED, That the Chamber of Commerce of the United States, recognizing the particular difficulties in the way of obtaining immediate legislative relief from certain inequalities of the present revenue and tax laws, commend the action of the Secretary of the Treasury, through the Commissioner of Internal Revenue, in calling into consultation representative business men with whose assistance an effort is being made by interpretation to

make these laws workable, practicable and equitable as was the intention of Congress.

RESOLVED FURTHER, That the Chamber of Commerce of the United States commend the recent action of the Secretary of the Treasury, through the Commissioner of Internal Revenue, in selecting a larger body to render similar service in reviewing individual cases of possible hardship which may develop in the operation of these laws, feeling that in so doing the best interests of business and hence of the people generally is being served; and

BE IT FURTHER RESOLVED, That the Chamber of Commerce of the United States urges upon Congress the careful consideration of such revision of the laws from time to time as will correct inequalities at this time determined or as may become apparent in the further administration of these laws.

National Budget

WHEREAS, National expenditures have grown to a point unprecedented in history in the current year, and

WHEREAS, New taxation to produce hundreds of millions of dollars and issues of bonds in large amounts have become necessary, now, therefore,

BE IT RESOLVED, That the Chamber of Commerce of the United States reaffirms the proposals for budgetary procedure as adopted by it in referendum with almost complete unanimity among the organizations in its membership,—573 votes to 10;

BE IT FURTHER RESOLVED, That the present exigencies of national defense make it peculiarly necessary that in the public interest expenditure and revenue should be considered together, and

BE IT FURTHER RESOLVED, That the President and the Congress be asked to take steps to inaugurate complete budgetary procedure such as is advocated by the National Chamber.

Installment Payment of Taxes

RESOLVED, That the Chamber of Commerce of the United States again recommends and urges the passage by Congress of a law providing for the payment of income, excess profits and other special war taxes in installments so arranged as to give adequate protection to the commercial, industrial and financial interests of the country.

Government Control of Prices

WHEREAS, The Chamber of Commerce of the United States, at its convention held in Atlantic City in September, 1917, adopted the following resolution:

RESOLVED, That during the war it is essential to the maintenance of sound industrial relations that there be no profiteering by producer, distributor, laborer or manufacturer; and

WHEREAS, By a nation-wide vote of its members the Chamber of Commerce of the United States has favored comprehensive legislation giving authority for the control of prices of raw materials, finished products and necessities of life for the military needs of the Government and for the public as well, to whatever extent may be necessary;

RESOLVED, That we reaffirm the position the Chamber has taken on this subject and earnestly urge that with the least possible delay Congress enact legislation which will grant authority for the control of prices in every line where war needs and the public interests require it on such a basis that the full production vital to success in the war shall be insured; and

RESOLVED, That since the fixing of prices and control of excess profits by taxation go hand in hand, it is our belief that present tax laws should be amended so far as necessary, if they prove inadequate to prevent abnormal and unreasonable profits as a result of the war.

Central Control of Government War Buying

WHEREAS, The Chamber of Commerce of the United States from the beginning of our participation in the war has continuously urged the necessity for centralization of control over the war buying of the Government, in order to secure the best possible results and at the same time protect and conserve the economic strength of the nation; and

WHEREAS, It seems to us clear that additional legislation is needed to provide such centralization of authority and responsibility;

RESOLVED, That we favor prompt action by Congress which will confer upon the President power to bring about for the period of the war such reassignment of functions and readjustment of relations among the various departments and special bureaus actively engaged in war work (as well as the power to create new agencies), as may from time to time prove necessary by changing conditions, to the end that adequate control over the operation of such agencies may be secured; and

RESOLVED, That the Board of Directors is hereby requested to continue its efforts for centralization of control and responsibility and to present the views of this Chamber to the Chief Executive and to the Congress of the United States of America.

Cost and Investment Formula

WHEREAS, Growing out of war conditions and the nation's necessities for every character of manufactured product, the Government, under the urgency of the conditions, must necessarily deal with industry rather than with the individual; and

WHEREAS, Congress as well as the national administration recognize that, if the industries of the nation are to efficiently respond to the national needs and preserve a high standard essential to future prosperity, fair and reasonable prices must be paid; and

WHEREAS, By reason of the unprecedented demand on the part of the Government, and the creation thereby of an unusual condition of supply and demand, the Government finds it necessary to pursue the policy of fixing the price on various commodities for its own requirements and that of its Allies; and

WHEREAS, There exists considerable confusion as to the basis upon which such prices should be made as relating specifically to

(a) Costs,

(b) Returns on investments;

THEREFORE, BE IT RESOLVED, That this body recommend to the Board of Directors the appointment of a permanent committee to study the conditions relating thereto and providing a formula upon which costs and investments may be ascertained, and reasonable prices fixed, to be recom-



60,000 Carloads of SOUTHERN PINE For Uncle Sam in 10 Months

The Nation's needs first, but plenty of lumber for all!

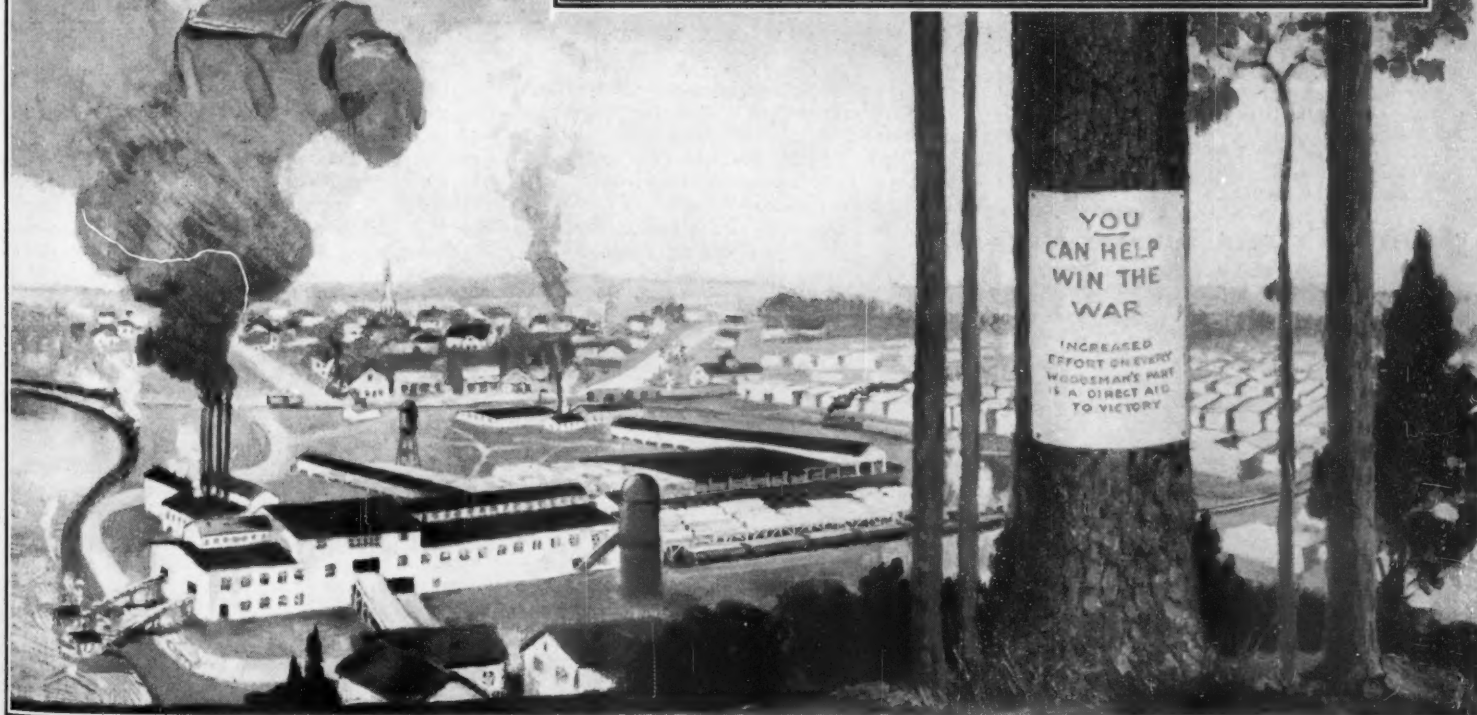
That is the slogan which today is governing the great operations of the giant saw mills composing the **Southern Pine Association**.

In perhaps no other industry has the Government's requirements been so extensive and speed in manufacture so urgent. When the call came for lumber every **Southern Pine** mill was instructed to put Government business first. Trained speakers were sent to the mills and into the woods to tell the thousands of lumber workers the war needs of the Government and to urge their redoubled efforts in getting the trees from the forests and cutting them into timbers and boards.

The shipyards are being supplied with more than one hundred cars of **Southern Pine** each day. So vast is the capacity of **Southern Pine** saw mills that no matter how great may be the requirements of Uncle Sam there will be plenty of honest, serviceable **Southern Pine** for all.

The **Southern Pine Association** represents one of the greatest industries of the nation and its members are a unit in the resolve to do everything humanly possible within its power in helping restore "Peace On Earth Good Will To Men."

Southern Pine Association
NEW ORLEANS, LA.



Serves Our Boys in Many Ways

Army or Navy pay checks
cashed and money exchanged.

Checking accounts opened.

Travelers Checks cashed and
sold.

Money sent and received—
by money order, draft or
cable.

Baggage stored or forwarded.

Mail sent in care of our Paris
office will be promptly de-
livered when regiment and
company are given.

These services are available at
our Paris office and through the
offices of the Societe Generale
near the camps in France.

*Wells Fargo Will be Happy
to Serve You*



Paris, 4 rue Scribe

Spreading Your Business

The important functions conferred upon members of the Federal Reserve Bank enable Irving Trust Company to assist its progressive clients in financing their Imports and Exports along modern competitive and economic lines. Write us for our descriptive pamphlet on Merchandise Credits outlining the possibilities of the new situation.

*Member of New York Clearing House Association
Member of Federal Reserve Bank of New York*

Irving Trust Company

Frederic G. Lee, Pres.
Woolworth Building
New York

JOHNS-MANVILLE
Asbestos



SIGNET
THE PERMANENT
MADE BY THE MANUFACTURERS
OF U-PAGS GLUE **INK**

mended through the Board of Directors to the War Industries Board, in order that confusion may be avoided and justice be had.

Experiments in Connection with War Supplies

WHEREAS, Specific cases have been called to the attention of the Chamber of Commerce of the United States with respect to delays and in some cases failure to secure supplies necessary to the Government's war activities, because production was suspended by the Government pending the result of experiments,

RESOLVED, That the Chamber of Commerce of the United States earnestly recommends to the Government that until improvement in any article required by the Government for war purposes has been demonstrated and adequate facilities provided for the production of such improved article on the needed scale, that the Government should procure articles of tried and known value required for immediate use which can be supplied to it in the necessary quantities.

War Committee—Cooperation with War Service Committees

RESOLVED, That the War Committee of the Chamber of Commerce of the United States should keep in close touch and actively cooperate with the problems of the War Service Committees of all the industries represented in the Chamber and should keep these committees authoritatively informed of all decisions of the Government buying agencies bearing on these problems.

Fire Insurance

WHEREAS, The subject of fire insurance and adequate protection of property value has become increasingly important, due to the war and its contingencies;

THEREFORE, BE IT RESOLVED, That the Board of Directors of the Chamber of Commerce of the United States is requested to consider the appointment of a special committee to study the whole subject thoroughly and to issue a referendum to its membership in the near future with respect thereto.

Transportation Necessities

RESOLVED, That the Chamber of Commerce of the United States urge upon the Director General of Railways the favorable consideration of the following suggestions relating to present pressing transportation problems:

(1) The efficiency of the railroads depends in large measure upon the unified control and operation of terminal facilities. To accomplish this effectively it is recommended that the operation and use of the railroad terminal facilities in each large city be placed under the supervision and control of a single competent individual.

(2) Railroad equipment, including motive power and car supply, is inadequate for present traffic and threatens to become so insufficient during the coming autumn and winter as seriously to restrict the industries and trade of the country. The public interests urgently require the promptest possible placing of orders for locomotives and cars in sufficient numbers to provide the transportation that the country must have in order to prosecute the war vigorously.

(3) While the standardization of railroad equipment is important and merits careful consideration it should be recognized that standardization is secondary in importance to securing as quickly as possible the locomotives and cars required to handle the increasing traffic that must be transported in order to keep the industries of the country in full operation and to maintain the steady flow of materials to the seaboard for shipment to Europe.

Railroad Conference

WHEREAS, The Chamber of Commerce of the United States recognizes the vital importance of developing a definite public opinion as to the best methods of conduct-

ing the transportation service of the nation, after the conclusion of the present Government control;

RESOLVED, That the Board of Directors of the Chamber of Commerce of the United States be requested to call a conference which shall be truly representative of all the interests of the nation—financial, industrial, commercial, agricultural, civic, and social—affected by transportation, such conference to be called for such time and place as in the judgment of the Board seems advisable.

The purpose of this conference shall be to consider the broad aspects of the transportation problem and the formulation of a basis for the control and operation of the transportation facilities of the United States after the conclusion of the present Government control.

Waterways and Highways

WHEREAS, It is apparent that the present traffic burden is beyond the capacity of the railroads, and that the vigorous and successful prosecution of the war is hampered thereby; that it is therefore imperative that our great rivers, canals and intercostal water routes, as well as our main highways, should be forthwith used to move freight;

BE IT THEREFORE RESOLVED, By the Chamber of Commerce of the United States that the Government, through the President and the Director General of Railroads, be petitioned:

(1) To organize and operate existing equipment, and construct new equipment for use upon the inland and coastwise waterways, in accordance with the authority recently conferred by Congress in the Transportation Bill.

(2) To complete trunk highways for heavy traffic where they can be useful in relieving railroad congestion.

(3) To adopt a permanent policy, assuring coordination of railroads, water routes and highways for traffic service.

Water Power Development

WHEREAS, The Chamber of Commerce of the United States, by an overwhelming vote in its referendum No. 24, endorsed recommendations which, in its opinion, would best bring about the utilization of the potential water powers of the country; and

WHEREAS, The war needs of the Government require large increase in power for industries, for the conservation of fuel, and for transportation;

THEREFORE, BE IT RESOLVED, That the Chamber of Commerce of the United States hereby earnestly urges upon Congress the immediate passage of legislation which will make available at the earliest possible date the water powers of the country.

Message to British Commercial Organization

THE Chamber of Commerce of the United States of America, representing more than one thousand commercial organizations and half a million business men, assembled in national convention, sends its most cordial greetings to the Associated Chambers of Commerce of Great Britain and the British Federation of Industries, and takes this opportunity to express the gratification of the business men of the United States that it is their privilege to be united with the business men of Great Britain and all our Allies in bearing their part in the great struggle which cannot end until the German threat to justice, morality, and civilization has been removed from the world.

The business men of America wish to assure you that in common with all our people, they are placing behind our President and our Government every resource in their control and every dollar they possess; that they appreciate fully the seriousness of the situation we confront and that they are prepared to undergo unflinchingly any sacrifice in standing with the brave soldiers of our own and the Allied countries until an honest and lasting peace is won.

Shipping via the Highways

(Concluded from page 51)

more rapidly from the freight station to the consignee. Congestion in terminals very frequently means that the freight which comes into the station, instead of going out rapidly, is left there on the floor of the station for some period of time, very frequently longer than the free time allowed it. The freight stations of this country have become storage warehouses. And it is for that reason that, in the large congested centers, we have embargoes.

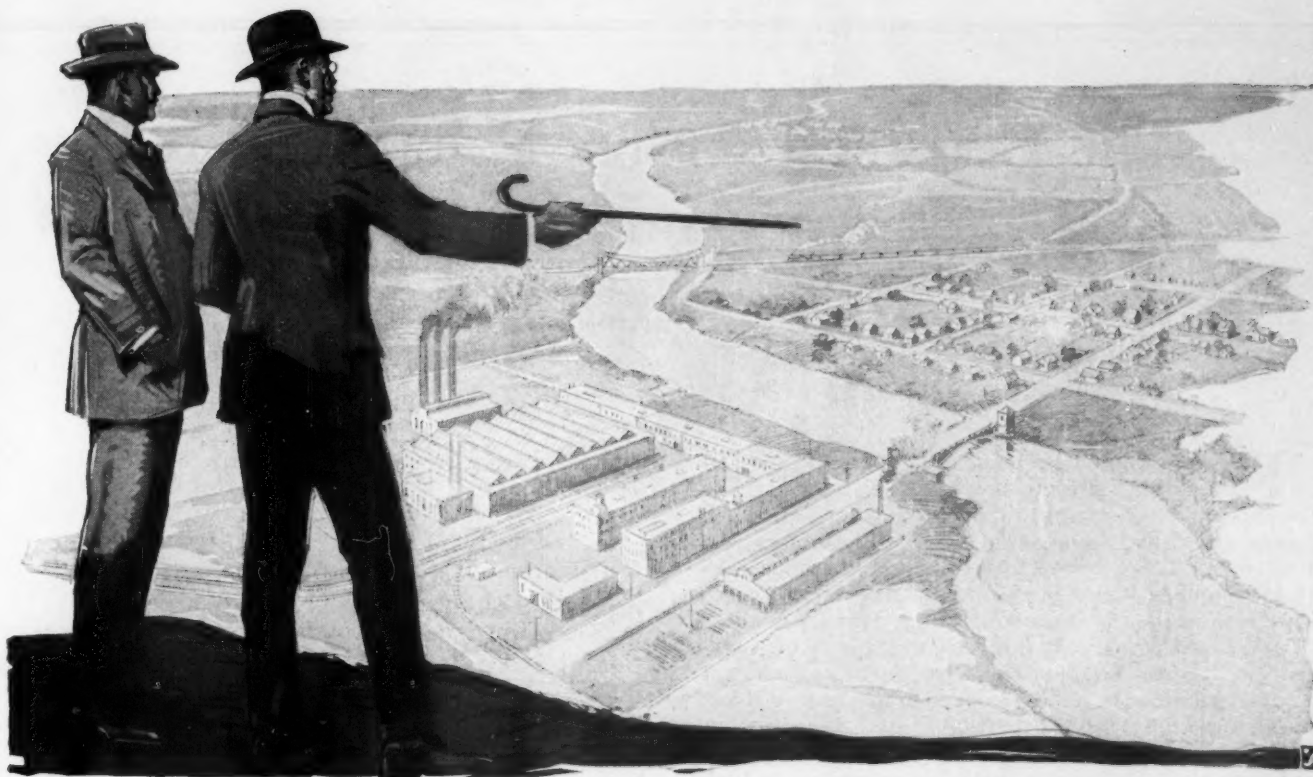
These problems came to us last fall, and we commenced the highways work. We found in the state of Maryland a very wonderful system of rural express wagons in operation. These rural express wagons start from the farms and run into Baltimore or Washington. Some of them come in a distance of 47 miles every day, carrying produce from the farm into the city. Those lines, in the main, reach farms that are not on the railroads or not upon any interurban lines.

What does a truck on one of these lines do? It passes every farmer's door. The farmer knows what time the rural express will come along. He puts out at his front gate whatever he wants to ship to the city. It may be a case of eggs or a can of milk; there may be

cream, and there may be an occasional piece of livestock. The goods are tagged to show to whom they are to go. The motor express picks up the shipment and goes on to the next stop. The goods are either delivered to the consignee, who may be an "ultimate consumer," a commission house or a merchant, or they may go into the freight station of the motor express route. And that car turns right around in Washington or Baltimore, as the case may be, and picks up from the merchants of the city the commodities that the farmer wants, and then it takes them back and drops them at the gate of the farmer. That is round trip service.

Again, traffic over the waterways very frequently must come to the boat over the highway. I predict that we are going to match up the waterway system—the inland waterway system—with the highway transportation system. Trucks will take freight from the station and deliver it to the boat. Other trucks will take it from the boat at the landing and carry it to its final destination.

A new type of transportation carrying every year millions of tons of freight is coming into being, and it has perhaps the greatest possibilities of any form of transportation.



“While I build my factory here, you build homes for the workmen there”

HOUSING employees is the big problem that confronts expansion. Far-seeing employers provide housing facilities as they plan the building of great factories or enlarging present ones. They realize that buildings and machines are useless unless there are men to man the machines.

Men are of no avail unless there are homes for them.

The time is past when merely a roof over the head can be classed as a home. The better class of workmen won't live in such.

The Better the Home, the Better the Workmen

When time is an element—when speed of erection is essential—when cost is considered—you cannot depend upon the old time-consuming method of building. There is an easier, quicker, more economical and more satisfactory way.

Lewis Machine Cut Houses

To supply the demand for houses of all year around construction that can be erected quickly for the least cost, we have designed over 100 different standard models. This wide range makes it possible to meet all conditions and requirements. They are planned, designed, constructed and priced to meet today's conditions. Or our architects and engineers will work in conjunction with yours to produce new designs and models.

The low prices of Lewis Machine Cut Houses are made possible by our careful planning which practically eliminates all waste and because of quantity production and by labor saving machinery.

Write or Wire
for Full Details

LEWIS MANUFACTURING CO., Dept. M General Offices, Bay City, Michigan

24 to 48 Hour Shipments

We can, as a rule, begin shipments of these standard models in 24 to 48 hours after order is received and continue shipments at regular stated intervals until the contract is completed. Each house shipped complete in a car.

Among the 1917 buyers of Lewis Machine Cut Houses who have purchased in quantity are such concerns as

The Goodyear Tire and Rubber Co.	Michigan Central Railroad
The Hercules Powder Co.	American Plate Glass Co.
The Bessemer Coal and Coke Co.	Inland Steel Co., etc.
Eastern Michigan Power Co.	Thompson-Starrett Co.
Tennessee Copper Company	U. S. Government

For Industrial House Builders, Government Officials, Contractors and Builders

Our facilities are such that we can start immediate shipment for the building of whole towns or communities. No contract is too large for us to guarantee record breaking time.



The Corrugated Fibre Shipping Box As a War-Time Economy

*An Address delivered at a meeting of the
Corrugated Fibre Association*

BY HENRY H. SQUIRE

THE many important economies of the Corrugated Fibre Shipping box are well known to its makers and users, to the carriers who transport it and, very generally, among the hosts of consumers who are its ultimate beneficiaries. The stupendous war-time requirements of our Government and our Armies are also becoming increasingly apparent to us all.

However, it is highly desirable that the intimate relation existing between these two factors of an economic equation be not overlooked in this time of stress and, for that reason, attention is invited to certain familiar facts whose bearing upon the nation's war efficiency entitle them to special consideration in that connection.

The prime requisites of our Nation at War may be roughly classified under the heads of Man-Power, Money, War Material, Food, Fuel and Transportation. The Corrugated Shipping Box ministers to these necessities--to some largely and directly--to all in some manner and measure.

ECONOMY OF PRODUCTION

Let us consider it first as to its manufacture. The United States Department of Agriculture in a recent report, estimates the substitution of fibre containers for those of wood in the year 1914 as equivalent to 1,070,000,000 board feet--a figure exceeding one-fourth of the total estimated consumption of lumber for shoo boxes in that year. If reliable estimates for later years were obtainable, doubtless they would be even larger. Of the credit for this immense annual saving of a commodity now urgently required by the Government in its prosecution of the war, the corrugated box is clearly entitled to the lion's share, not alone because of its preponderance in the fibre box field, but also by reason of its extreme economy of material. Furthermore, there is no appreciable offset to this saving, for corrugated boxes are manufactured chiefly from by-products which, in the day of the wooden box supreme, were considered waste. Even the comparatively small volume of new wood fibre that, with other materials, enters into their composition, comes for the most part, from wood that is valueless to the lumber producer. Thus, in addition to the more remote benefits of forest conservation, we show a very large direct saving of power and product in an important war industry.

Another production economy of the corrugated fibre box is in the saving of man power, through the employment of women in the box factory. The use of female labor in the manufacture of corrugated boxes is unique in the shipping box industry. It is so general, and so evidently susceptible of further expan-

sion, as to give proof of much progress in labor dilution and promise of more.

LOW COST OF DISTRIBUTION

The distribution of shipping boxes to the trade begins with the loading of the car at the box factory and ends only when the boxes are in the storehouse of the shipper who is to use them. In this movement from producer to consumer, there is economy in the corrugated box at every stage. No other reliable shipping container can be handled empty so readily, or with so little expenditure of labor. The boxes are compactly baled in packages easy to move with hand or truck; one man can stack them even to the car roof, thus insuring a revenue-paying load for the railway; and, when so loaded, a car will deliver to the user as many boxes as would require two or three cars loaded with ordinary box material. Furthermore, whenever boxes must be shipped in made-up form, ready for packing, this differential is greatly multiplied. However, figure on a minimum saving, using the most conservative estimates in all your calculations, and you will find that corrugated and other fibre boxes, in their distribution alone, are saving annually to the railways and the public not less than twenty-five or thirty thousand cars which, through this economy of space, are released for other uses. Such a saving of railroad equipment and motive power by a single patron industry is notable. Surely it is worthy of encouragement and all possible imitation, for if similar economies could be practically developed in all lines of shipping, the present lamentable transportation situation would be relieved immediately.

SAVING IN ACTUAL SERVICE

But of all the advantages of the corrugated box, those afforded by its use in actual service are most widely known and appreciated. These are the excellences that have recommended the package to American shippers and carriers and have made possible its manufacture and sale. All of them rank as public economies and bear with varying directness upon the success of our war activities. Thus, the compactness of corrugated boxes in their folded form, effects great economy of storage room and floor space, needed for the speeding up of production, at a time when no unnecessary building operations should be undertaken. Their lightness, readiness for use and ease of sealing and unpacking eliminate the rough hand labor required in the preparation, closing and opening of other boxes, and so facilitate the dilution of labor in packing and receiving rooms. They also reduce fire risk by abolishing the litter of more in-

flammable packing materials at both ends of their journey, so as to increase materially the safety of plants whose maximum production is now more than ever needed.

When they are sent out with their content of merchandise, their lightness and compactness again come to the fore with a further saving of tonnage and car space amounting to from five to fifteen percent, and even more in special cases. By this economy of existing railway facilities, they effectively accelerate freight movement without necessitating additional power or equipment.

The reality and importance of this particular saving are sufficient to have made it the basis of numerous appeals for rate discrimination against all goods shipped in corrugated boxes, and, although these requests have been refused on grounds of equity, the basic facts of space and weight economy in the corrugated fibre box stand proved and universally admitted.

A very potent influence for the constant extension of corrugated fibre packing within its proper field is found in the efficiency of the package as a protector of its contents from breakage and pilfering. Its record in this regard contradicts every claim of those propagandists who charge against the fibre box, losses arising from a multiplicity of external and wholly foreign causes, and who propose cure-all remedies involving initial and operating costs which far exceed the most fanciful estimate of the expense complained of.

SPECIAL PACKAGE PROTECTION

The truss construction of corrugated fibre board gives it a peculiar quality of shock absorption, without sacrifice of other essentials, while the proper sealing of a corrugated box makes undetected rifling of its contents practically impossible. On the sworn testimony of actual users the savings thus effected by the adoption of this packing method have, in individual cases amounted to hundreds and even thousands of dollars annually. In the aggregate, this prevention of waste is sufficient to compel attention in time of peace. The economic pressure of the war lends added importance to the subject and justifies all the consideration that may be given it.

Still another advantage is accessibility of supply. Being made chiefly of materials everywhere abundant, the corrugated container may be had whenever and wherever needed, and in fact, it has relieved many a desperate case of box shortage. Today, even

while this subject is before us, there are industries which, from failure of their former sources of box supply, would be unable to make deliveries, if they had not turned to the corrugated shipping box for relief from this serious situation. Some of these industries are food producers, the volume and importance of whose output make prompt and regular movement essential to our national welfare at this critical time.

PRIMARY EXPENSE REDUCED

Finally, although instances are not wanting in which, for one good reason or another, the corrugated box is preferred to an equivalent of lower cost, these are exceptional, for as a rule the higher price of other boxes shows a handsome margin of saving to users of the corrugated container. With the strictest conservatism, the aggregate of saving in initial cost effected by fibre boxes (which are mainly of corrugated construction) cannot reasonably be computed at less than four to six millions of dollars a year. These millions are a free gift without consideration demanded or penalty entailed, and little imagination is needed to see them, with all the other millions incidentally saved, flowing direct to the coffers of the government through tax and bond investment channels, or else, back into the current of industry to aid in the perfection and speeding of production.

Thus the corrugated fibre industry is doing its full share in furtherance of war economy. It saves in men, money and material. It promotes food production and distribution. In a large way it aids the conservation of transportation facilities, including motive power partly translatable into terms of fuel consumption. These savings, actual and daily demonstrated, are in the aggregate so large as to command special attention and respect.

The shipping box of corrugated fibre was originally developed as a breakage-saver and is still preeminent as such. One by one its incidental economies became apparent and assumed their true proportions. All these have long been recognized, but never before were they so essentially important as in this hour of national stress and struggle, when every prudent saving has its influence for victory and every waste, its leaning toward defeat. At this crisis then, the corrugated box brings to American Industry still larger offerings of painless economy and improved service, and by every sign of developing demand we are assured that these benefits are truly appreciated now when they are most needed.

The Corrugated Fibre Association

Dayton, Ohio



More than Smart—

With a Cheney Cravat your neckwear is beyond reproach.

Smart in pattern and cut, they can always be relied on for unusual service. The new REVERSIBLE Cravat, gives double wear and double value, thus embodying *Smart Economy*.

In selecting neckwear make sure you get

Cheney Cravats

Made by the Country's Leading Silk Manufacturers
CHENEY BROTHERS, New York



Taking advantage of Investment Opportunities

OUR current investment list presents a wide range of sound securities at prices unusually attractive. It will be sent upon request for H-67.

The National City Company maintains complete departments for the investigation and analysis of different classes of securities.

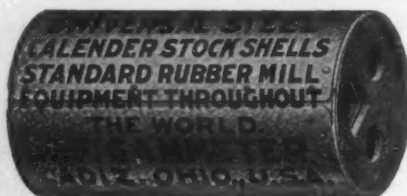
These departments are equipped to give full information as to the status of any securities you may now have, and to suggest, if desired, advantageous readjustments of your present holdings.

The National City Company

National City Bank Building, New York

Correspondent Offices in 24 Cities

Bonds Short Term Notes Acceptances



Industrial Idealism the Motive Power of American Progress

(Concluded from page 32)

must be reckoned with and adjusted if industry and commerce are to go on under private initiation and private leadership and management is perfectly plain, and it is the part of business to find the solution for it. Otherwise, the extremists will find willing ears to their strange doctrines and willing arms to aid them in their strange experiments in government. The Bolsheviki will appear in America as well as in Russia to paralyze all business and to turn us over to the tyranny of the mob, which is more cruel and destructive even than that of the autocrat.

There are just as noble characters to be found in the ranks of labor as may be found in the ranks of any other class and condition of men. There are many amongst them who have for years been trying to raise the condition of labor to a higher level. Has not the time come when those in business who believe in cooperation for the common welfare may seek kindred spirits in the ranks of labor and lend them a helping hand, thus uniting the elements necessary to carry forward our great democracy to a still higher estate, suppressing those restless spirits of discontent who by appealing to the brute in man would bring about a revolution.

For years there existed in this country a condition of law that, in my judgment, accounts for much of the trouble between business, especially *big* business, and the people generally, and between capital and labor.

When individualism began to give way to collectivism and a new force was sensed in cooperation, men began to confer and to grope for the means of utilizing this new human power. At first the instinct of individualism—of seeking to find the means of promoting self-interest by getting the best of one's associates even, made the progress slow. When that stage was passed, the dominant thought was how to corner the market and raise the price;—how to levy something upon those outside of the combination for the benefit of those inside of the combination. The Common Law stepped in and forbade this upon the ground that it was inimical to the general public welfare. But the Common Law was only applicable to intrastate trade. Congress, therefore, enacted the Sherman Act to make unlawful contracts, combinations and conspiracies to restrain commerce amongst the states and with foreign nations. It was thought by many that this was merely applying the Common Law to interstate trade; but the United States Supreme Court made two decisions upon the act that differed radically from the Common Law. The legality of combinations in restraint of trade by federal law was, therefore, declared to be merely a matter of form. By Common Law it was entirely a matter of moral effect,—effect upon the public welfare. Cooperation of independent units was by Common Law regarded with favor when it did not injure the public. It was regarded as wrong altogether by federal law. Under that law, it became a question of the survival of the fittest. For fifteen years the moral sense of business men was so distorted that it will take another generation to restore it to full vigor, although the United States Supreme Court five years ago reversed its decisions on both points and adopted the interpretation of the Common Law.

Men are still afraid to cooperate. Lawyers are still diffident about advising clients that they can rely on the reversing decisions

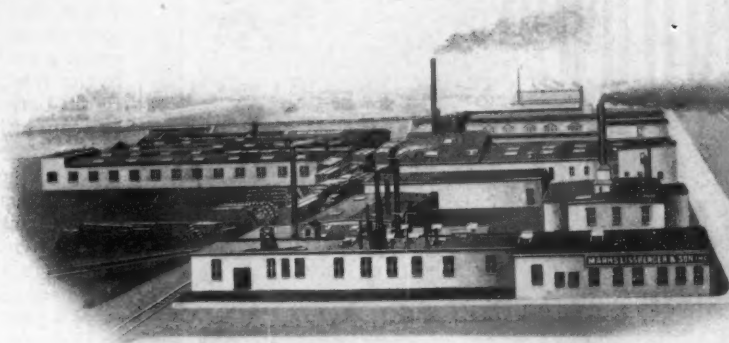
in the Standard Oil and the American Tobacco Company cases. Moreover, the legal representatives of the government cannot yet fully accept these decisions as final. And yet they undoubtedly saved this country from a revolution. Under the old interpretation, men's sense of right and wrong morally had become dulled and was becoming duller with the years. The greed for wealth, the acquisition of which through crooked paths in the moral world, straight though they had been made in the legal world, was rapidly creating a plutocracy as mighty and as offensive to the great mass of the people as any autocracy or aristocracy in history. Meanwhile, the spirit of cooperation in all the relationships of life was instinctively present in the breasts of men, and it began to break forth everywhere, seeking to escape the provisions of the Sherman Act, as at first interpreted.

When the Supreme Court reversed itself in 1912, and declared the federal law to be on all fours with the Common Law, and subject to a moral, rather than a technical and formal interpretation, business men, for the first time, awakened to the wrong which had been done themselves as well as the country. They at once began to adjust themselves to the new conditions, and to seek the means of cooperating in the spirit of the Common Law. The Chamber of Commerce of the United States has been the organ through which and by which this message of the new freedom for business has been transmitted to our local chambers, and to our national trade associations and thence to the American business men and the public. We have in season and out of season preached the doctrine of real cooperation—where men combine to benefit not themselves only, but the public also. If you hold to that kind of cooperation, you cannot violate either the Sherman Act or the Common Law, nor can the laborer, nor the farmer, nor any class or condition of men. When we have all learned that lesson and taken it to heart, suspicion between employer and employee will begin to disappear; conflict between capital and labor will cease; thoughts of coercion will change to plans of cooperation, the spirit of greed and gain will be transformed into a spirit of service.

Spirit of Organized Business

THERE is a wonderful mission for the Chamber amongst business men. We have thought of business and talked of business as a cold and callous thing. We have said to ourselves and to our neighbors so often, "there is no sentiment in business," that we have blinded our eyes to what business ought to be. To me, the highest mission of the Chamber is to put a soul into business, to transform the cold clay into the sentient being. In that sentient, soulful business only may democracy find its safeguard and protection. When we have found out that what is not for the common good is not for the good of business,—when we have transmitted that creed to our fellow citizens and made them understand that it is our creed and that it should be and must be the creed of labor,—of agriculture, of the citizenship of America,—we shall have advanced the happiness and contentment of our people an hundred fold; we shall have placed democracy upon a broader and surer foundation, and have mounted infinitely higher in the scale of civilization.

BEST BECAUSE



Use Bestmetal

THE best anti-friction metal that can be made is none too good for the machines in your shop. If the soft bearing metal you use will not stand a maximum of speed and wear, then it becomes a liability—cheap to buy; cheaper to get rid of. The man who knows his machines and their needs, and who understands the economy of buying *quality*—or paying for *quality*—or investing in *quality*—will not buy bearing metal of *doubtful* quality. He will not even buy bearing metal of good quality. The only bearing metal he will consider is the BEST he can find.

Bestmetal is hard to make. The whole process is difficult and exact in the extreme, and the materials used must be the purest obtainable. That is why the quality of scores of nondescript grades of soft bearing metal is often open to question.

Such a nondescript product may be had—it may be good—it may even rank with the best; but what is the guarantee of its excellence? What sophisticated user of bearing metal cares to take a chance on it?

Why indeed should he take it when all he need do is turn to a maker whose reputation has for seven decades been an unqualified guarantee of his whole output?

We have sold what—with intention—we call THE BEST METAL for thirty years on the basis of such a guarantee. We began the scientific manufacture of soft metal bearings when the demand for that product as measured by present day industry was only beginning. Our output has grown with that demand.

And from that day to this we have said to all comers, "This metal will stand more wear and speed than any other babbitt or anti-friction metal. If you

find it unsatisfactory we will return your money without question or debate."

Back of that statement stands our many decade built reputation. The record of what we have done is an open book. The man who wants to buy his bearing metal without further thought or worry as to just what he is getting, can consider that record; and then buy with absolute assurance that his bearings at least are the last word in certainty of performance and durability. He might get something first rate elsewhere; but he can know that he will get it here.

Our vast plants, growing year by year, speak for themselves. They have grown because thousands come to us on the strength of what we have done. And in like manner thousands return, not merely for bearing metal, but for others of the score of white metal products on our list.

We take pride in making whatever we make as perfectly as the thing can be done. That is the corner stone of our theory of doing business. Whatever we make is made right, from right materials and it can be absolutely depended on for the purpose for which it is made.

Marks Lissberger & Son, Inc., Long Island City, New York

Solder Anti-Friction Metals Lead Pipe-Tin Pipe Lead Ribbon Babbitt Metals Die Cast Metal Lead Wire
Shrapnel Balls and all White Metal Alloys.

IT IS BEST



Build the Houses Quickly

OUR mills, located at lumber distributing points, are ready to turn out finished houses quickly and economically. Erect the houses for your labor while the factory is being built. Hold your labor by providing comfortable homes for your men.

The National Method has already proved itself. Houses are shipped in pieces or in sections ready to go up immediately. In a short time a gang of men can transform your property into a village of good, substantial homes.

We co-operate with you in every operation from the planning and designing of houses to their erection.

Write or wire us for plans and specifications.

National Builders, Inc.
Saginaw, Mich.

Faith and Work

(Concluded from page 32)

the human mind, from which all things come. But where a point of standardization has been reached in an industry, why should not government take that industry into its own hand and carry it on? It is only a question of governmental efficiency.

I ask you this question: Even with governmental inefficiency, are we not going to take things into our own hands unless business, large business, and small business, gains a real social sense? And what is a social sense? It is the relation between your dollar and my need; between your power and my heart. We cannot have a republic that will be lasting unless those who control industry feel for me and with me; unless they regard me as entitled to a portion of what they undertake to make with their money,—a partner with them. Surely it is not so, that there cannot be invented in this world some new kind of co-operation, in which the worker himself can have a part.

There are great ramifications to this thought and it is necessary that common sense should be exercised in curbing the power, because when a people collectively get a lust for doing things, they may go to dangerous lengths. But work is to make us, as work has made us, and the man who works is the man who is to be master.

Progress Out of Dissatisfaction

WORK, all, every one must work, and the pride of America is that we have a smaller population who do not work than any other nation. It is because of our work that we are great. It is to be because of our work in the future that we will be entitled to have success. So we are going through a real process of evolution, a process out of which will come a new and a better America.

First Aid For Public Utilities

(Continued from page 54)

the Chamber of assisting in the rightful solution of this problem is a patriotic service and one of tangible assistance in the prosecution of the war.

The Government has lent its aid to this problem in another substantial manner. It has passed the so-called War Finance Corporation Act, which will undoubtedly afford to many of these companies, either directly or indirectly, a channel of finance that would not have existed if the act had not been passed. Congress, fearful lest further inflation might ensue as a result of such legislation, has provided in the act more rigid requirements as to percentages of collateral and the like than I think were necessary or desirable under existing conditions; but we must do the best we can with the tools at our command.

The one great and controlling factor is this—the revenues of these companies must be increased to an extent that will provide net earnings sufficient to enable the companies to finance their maturities and attract the new capital it may be necessary for them to obtain to meet war needs,—whether that money is to be advanced by individuals, by banking corporations, or by the Government itself. No financial agency, individual, corporate, or governmental, can be expected to make improvident loans or investments.

When the proper time arrives, when we have opportunity for the deliberate consideration of such problems, I look forward to the working out of a plan which will involve closer co-operation in the future between the public and these companies in their dealings each with the other. A plan that in its operation

The Period of Reconstruction will demand as
much from

The Port *of* Philadelphia

as the present era of war

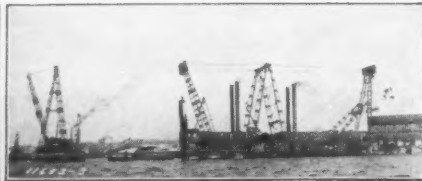
EVERY business and industrial investment on or near the Delaware River is based on continuing activity. The city of Philadelphia is preparing for the future merchant marine by erecting great municipal piers and building harbor extensions.

Department of Wharves, Docks and Ferries
Bourse Building, Philadelphia, Pa.





Winchester Repeating Arms Co., New Haven, Conn.



A Story in Pictures

The photos suggest the range of our activities. Sugar, sulphur, textiles, automobiles, munitions, lamps, electric power—fully equipped plants for the production of all these are depicted.

Behind us lie 33 years of engineering and construction work. The experience gained in constructing several hundred million dollars worth of work is at your disposal.

WESTINGHOUSE CHURCH KERR & CO., INC.

Engineers and Constructors

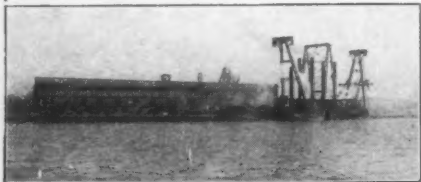
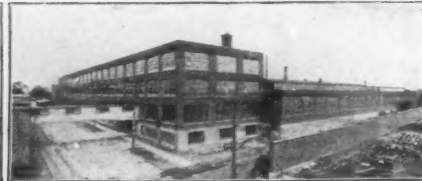
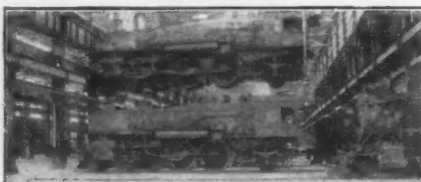
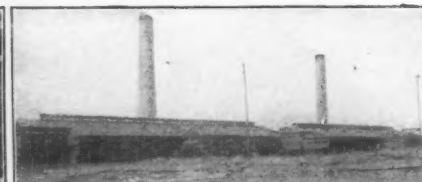
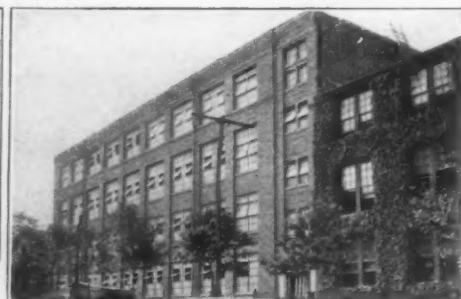
37 WALL STREET, NEW YORK

MONTREAL
Shaughnessy Building

WASHINGTON
Wilkins Building

CHICAGO
Conway Building

SAN FRANCISCO
Southern Pacific Building

Winchester Repeating Arms Co.
New Haven, Conn.Erecting Shop, C. B. & Q. R. R.
West Burlington, IowaSavannah Sugar Refining Corp.
Port Wentworth, Ga.Simplex Automobile Co.
New Brunswick, N. J.Erecting Shop, Chicago & Alton R. R.
Bloomington, Ill.Freeport Sulphur Co.
Freeport, TexasWestinghouse Lamp Co.
Bloomfield, N. J.American Cyanamid Co.
Niagara Falls, Ont., Can.Utah Light & R'y Co.
Salt Lake City, Utah

The Lackawanna Mills, Scranton, Pa.

**ENGINEERS and
CONSTRUCTORS**
A purely engineering
organization with
nothing to sell except
services.

W.C.K.

Employer and Employee Plus Understanding

(Concluded from page 17)

tion departments and our business managers prohibited the emergence of a labor policy unless public sentiment was very strong. But public sentiment was not strong. We have in this country always drifted in labor matters. There is no person or group of persons who can speak with an authoritative voice for capital as a whole; no person or groups of persons that has the right or power to speak for labor as a whole; no person or group of persons that can properly represent the public.

The implication of all that I have said is that a fundamental prerequisite of real cooperation between employer and employee in our war-time production is: (a) the establishment of a national labor policy; (b) the establishment of a national war labor administration; (c) the hearty cooperation of the business world with this administration in carrying out this policy. Fortunately enough, within the past few months steps have been taken to provide the national labor policy and the national labor administration of business. Cooperation with that administration when it is actively in operation can be safely assumed.

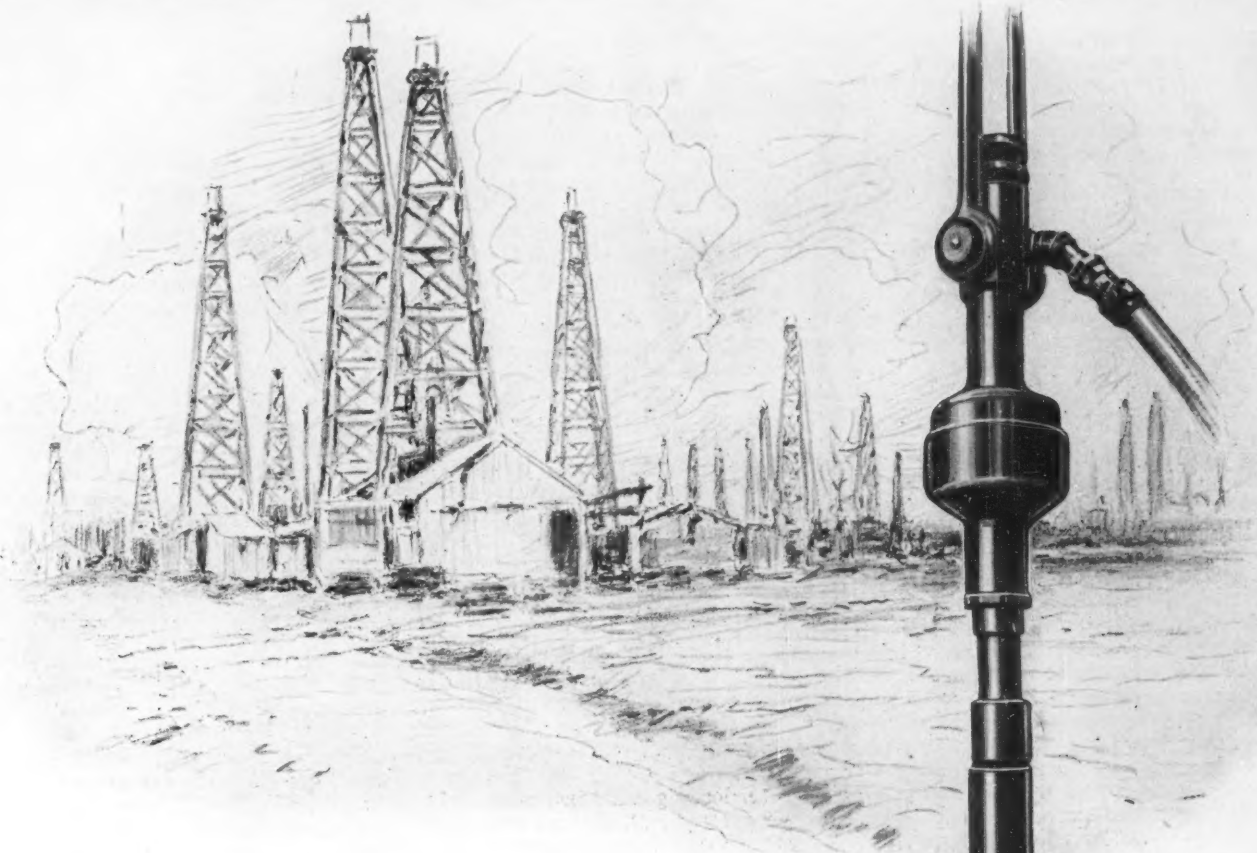
Labor and Capital Cheek by Jowl

THE broad outlines of this organization have been drawn and an appropriation bill for the necessary funds is now pending before Congress. The scheme of organization provides for a range of bureaus or services which can deal effectively with the various problems of labor in production. In the list are: an Adjustment Service, of which the War Labor Board just proclaimed by the President will be a constituent element; the United States Employment Service, whose duty it will be to provide the necessary supply of labor; a Conditions of Labor Service to safeguard conditions in war industries; a Housing and Transportation of Workers Service, for which an appropriation bill of \$50,000,000 is now pending; a Training and Dilution Service to supervise the training of workers; a Woman in Industry Service to meet the problems arising from the increased participation of woman in industry; an Information and Education Service, whose duty it will be to promote sound public sentiment on labor matters, "sell" to employer, employee and the public the war labor policy, and promote in individual industrial plants the local machinery which will make it possible to carry out effectively the national labor programme. This range of services has been brought into definite contact with the production departments of the Government by a simple device which has the hearty approval of the departments concerned. It may reasonably be expected that an effective war administration will emerge if the necessary funds are forthcoming.

First Aid for Public Utilities

(Concluded from page 76)

will retain the manifest advantages of the private operation of these enterprises, subject of course to public supervision; a plan that will insure a fair return to capital already invested; a plan that will offer to the public, more or less generally, an opportunity from time to time to invest in these enterprises the capital needed for their development upon an assured basis of an adequate return; a plan that will provide an absolutely safe investment for the masses in suitable allotments. Such a thought is not utopian.



The Needle that Grinds through the Rock Ribbed Earth down to Oil

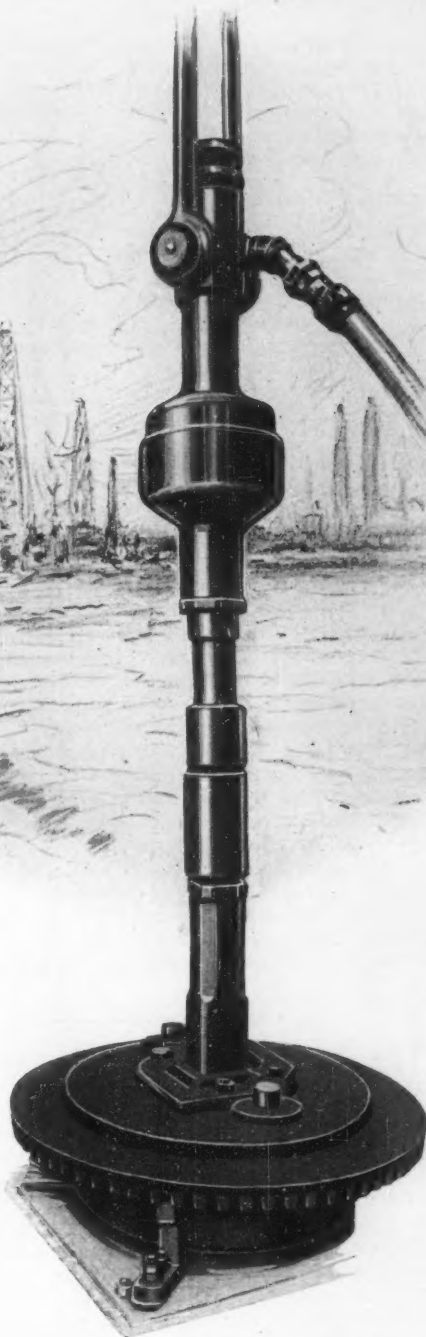
A NEEDLE, thousands of feet long, gnaws and bites its way down into the earth. Through quicksand and clay and rock and all the buried refuse of ages, it takes its way. At last, some three or four thousand feet below, it taps some great reservoir, and the oil gushes fountain like from these depths.

Above it looms the straddling, ungainly derrick—that spindle-legged monster that dots the landscape of every oil region like the bony survival of some geological epoch. With it goes the complex devices that make the drilling tools of twenty years ago look like toys; and the methods and resourcefulness that have long made American equipment and American ways of oil drilling the standard of the world.

American enterprise and mechanical genius have jumped the oil production of the United States from 2,000 barrels in 1859 to nearly 341,000,000 in 1917—more than 70 per cent of the world production. They have made possible the source of the substance which, like ships, soldiers, food and guns, is now one of the great essentials without which the war cannot be fought—the substance that drives the automobile, gives life to the aeroplane, and drives our ships at sea—the substance that is the life blood of all instruments which depend for motive power on the internal combustion engine.

The very wheels of history today run on oil. The story of this age cannot be separated from the derrick and the spudding bit; from the bull wheel and the Samson post; from the Rotary and the slush pump. The one could not be what it is without the other.

Even the ancients, with their less complex wants, felt the need of oil. The Hindus and the Chinese drilled for it short distances with clumsily constructed, hand worked percussion bits—and used the raw product as far as their limited chemistry would permit.



To this day there are parts of the world where the shovel is used instead of the drill; and where, when the well is dug, a man descends with bucket and rope, while a great bellows, worked by hand from above, throws air down into the depths that the worker may breathe. Sometimes he encounters the natural gas that rises from the oil pools as bubbles do from a glass of vichy. And when that happens it is generally the end. But the substance sought is precious; and always another takes his place.

In the lead today in this epoch making industry is America. In the lead throughout the world are American methods of drilling for oil. From the drilling of the first oil well at Titusville, Pennsylvania, in 1859 to the present day, we have held the field against the world. Always the American way was the simplest, the most direct, the most ingenious; and the world adopted it.

In like manner American oil drilling machinery, the thing back of the enormous oil production of the present day, the equipment that drives that magic needle, has also become the standard of the world; so that today the very fortunes of this war and of civilization are depending in this country on the men who make the derrick and the drill.

Oil Well Supply Co.

Main Offices—Pittsburgh, Pa.

New York

Los Angeles

San Francisco

Tampico

London

The Question of the Terminals

(Concluded from page 26)

brought about these changes exist in other sections of the city and in many of the larger terminals of the country; and it is believed that the operation of these freight facilities will be helpful in causing railroads to adopt similar treatment in other localities.

Cooperation Necessary

BUT this development in this particular territory would not be possible except through the cooperation of the railroads owning property in the district. It happened that these railroads did not serve competitive territory, so that while construction was along cooperative lines there was no necessity to take up the consideration of cooperative operation as applied to handling of freight to joint competitive territory.

These conditions will not exist in other localities, so that ultimately the full principle of cooperative operation will have to be put into effect before a complete solution of the whole terminal problem can be brought about.

It is a safe general deduction that where a town situated at some distance from a main distributing center is reached by two railroads from that center, one of them is the more economical—distance and grades considered. It will cost more to transport a car of commodities over one of these railroads than over the other, and in the interest of economy and efficiency the commodities to this town should be handled over the most economical route.

This principle cannot be fully applied until there is unified operation of transportation systems, either through government ownership, the unified control of all railroad properties under one operating management or in groups serving natural traffic divisions, or until some form of pooling of earnings and expenses is legalized.

As an example: Under average conditions about 40 cars of less-than-carload freight are shipped each day from Chicago to Kansas City, over seven different railroads. These seven railroads are not of the same length between Kansas City and Chicago, nor have all of them equally low grades, nor are they all on a parity in regard to the other facilities which may make for economy of operation. It is evident, therefore, that cars between these two towns not handled over the most economical route are handled at a loss, and that this loss must be absorbed by all of the railroads, since, as a rule, advance in freight rates are predicated on the showing of groups and not of individual roads.

Combining the Shipments

THIS is but a single example. When it is remembered that—on an average—over 2000 cars are shipped from Chicago daily and of these 2000 cars over 1200 are shipped to competitive points, some appreciation may be had of the importance of applying a proper solution to this phase of the problem.

The average loading of less-than-carload cars is about seven tons, while the capacity of the car is usually several times that amount. By combining shipments—as outlined above—a heavier loading can be secured, which would be reflected in reduced operating expenses and relief in car shortage.

This heavier loading could be secured even under existing routing if, instead of loading cars to destination at the main terminal, shipments were grouped with reference to operating divisions of the railroad and handled in fully-loaded cars to one or more division points distant from the main terminal and there sorted and reloaded in order of destination in the next division.

The Neck of the Bottle Is Ships

(Concluded from page 38)

We have already had examples of heroism and courage on the part of our young men that have caused us to thrill with pride in having men of the same stuff that Americans were made of in the early days. Sometimes in the days before the war you heard from the pulpit or the press statements that the youth of our day were not of the same type as their fathers; that they had not the stuff of the men of the Sixties and Seventy-six. Some people thought the boys of our day were soft, given to pleasure or devoted to business, and we were told that young America was money-mad or pleasure-mad; that the high ideals and the will to sacrifice of the youth had departed. If this war had not come, we might have died dishonoring the youth of 1917, for there has not been a moment since that Independence Day of April 6, when a young man was needed to give his life, when there have not been five saying, "Here am I."

"So near is grandeur unto dust,
So near is God to man,
When duty whispers low, 'Thou must,'
The Youth replies, 'I can.'"

When this war has been won, and it will be won, the boys we have sent abroad will be coming back, most of them, and those who do not come back will sleep in honored graves on the sacred soil of France. When they return bringing with them the guarantee of government of the people, by the people and for the people of all lands—when they come—we will give them a welcome such as no heroes have

ever received before. But when they march through the streets of your city and you stand and hail them, let no man or woman or child look at them who is not in possession of a Liberty Bond or a Thrift Stamp.

The Chamber of Commerce of the United States represents largely the employing interests of America. It has opportunity of service now in a way that will make effective all our resources. The President of the United States has issued a proclamation creating a National Labor Council. It is an event which the Chamber must hail with pleasure, because for years the Chamber has been studying the relations between employer and employee with a hope of bringing about friendly adjustment on fair terms that would make no cessation in business.

We cannot win this war unless the men in overalls, the men in the shops and in the counting houses, are all enlisted and mobilized; and there is only one way to mobilize them and that is through just compensation.

Toward that end there is no body of men in America who can contribute so much as the Chamber of Commerce of the United States, and I beseech the men of the Chamber, as an officer of the Government charged with the expenditure of large sums which they help to pay, to cooperate and to urge their employees to cooperate with this Labor Council, and when there are differences, to submit them to that Council; and when the Council executes a decree, whether they approve it or not, to accept it. On that basis we will win the war.

The Nations in Their Harness

(Concluded from page 11)

speak with any certainty—your expenditure is now about 16 billion dollars.

The other point to which I referred was the shipping capacity; that is the tonnage available to carry goods from here to our country. And not only goods—far more important, to carry men, to carry your own boys, who are anxious to get over there, in order that they may take their part.

One of the greatest precautions for the destruction of the submarines and the protection of our vessels which cross the ocean is the construction of ships.

From every quarter there come demands for accommodation in ships. The difficulty always is to find the ships to carry all of the men and all of the things that are wanted over there, and then there are further difficulties of congestion of traffic, which necessarily arise.

All those problems are well under way, but, above all, the safety of your men and of the ships which carry them and the commodities which go to our country depend upon our navies, and our navies alone.

Our navy has carried many millions of men. It has actually transported 13 million men.

And mark, over and above that, it is computed that the material which our navy has carried represents more than 130 million tons. If I were to give the figures of chemicals and explosives, they could convey nothing more than that. The figures are stupendous.

And let me say now that since we have had the advantage of your navy cooperating with ours, we have the most splendid spectacle of two navies working in the closest cooperation which perhaps has ever been known.

And when I mention the navy I think it is due to the mercantile marines of your ships and of ours to bear them in mind, to remember that they have ceaselessly with great gallantry set out on their voyages, time after time. I have myself talked to one of the men who told me that he had been four times torpedoed, and had to be saved from his ship and still he goes on doing the work just the same, just as cheerily as if there were no such things as torpedoes.

The submarine is undoubtedly not making the way that its admirers thought it would. There has, of course, been quite enough destruction. I don't want to minimize it—but I do want to impress upon you that nevertheless it has been checked.

AND now turn to the land. During the last few weeks we have had to sustain heavy concentrated attacks.

The whole importance of an attack of this kind is that it should succeed completely; if it does not the cost of the attack is infinitely greater than is warranted by the success, even counting the success to the utmost, as we know it.

There will be other attacks. There must be other attacks. Germany's one chance, and one only chance is to continue to make these attacks, as apparently her military commanders thoroughly realize; and we have to be prepared to sustain them with the help of those whom you are sending.

I am not sure that Americans quite recognize how important it is to us that that decision should have been arrived at by the President which allowed your divisions—your soldiers as they now go across, to be brigaded with the French and the British. It means that for the time being they will be engaged in the battle with us, and we are most thankful that your President, speaking for you, enabled that to be done, and done without hesitation.



SHERWIN-WILLIAMS

PRODUCTS



Probably the biggest individual varnish order ever awarded
has recently been placed with us for

SHERWIN-WILLIAMS AIRSHIP REXPAR VARNISH

It was placed after competitive Government tests so severe
that only a varnish of the highest quality could survive.

We are manufacturing a full line of approved finishes
for airplanes, ships, cantonments, munitions and general
war equipment.

Write for list of approved paints and varnishes for war purposes.

THE SHERWIN-WILLIAMS Co.

CLEVELAND NEWARK WASHINGTON CHICAGO
NEW ORLEANS SAN FRANCISCO ST. LOUIS

Contractors to the Governments of the United States, Great Britain and
Ireland, Canada, Australia, France and Italy.

Fifty Million Dollars for Houses!

Houses for shipyard workers to live in—so
we can build ships—and win the war!

Congress has given the money.

Congress will give MORE money.

How will it be spent?

How SHOULD it be spent?

How did England spend \$700,000,000 for
houses for HER war workers?

Why is she planning to spend another
\$1,000,000,000?

What is France doing?

What have other countries done?

What must WE do?

This is a new publication, entitled "The Housing Problem in War and in Peace." 120 large pages, including 67 pages of illustrations showing the marvelous new "garden cities" which England has built for munitions workers during the war. Issued by the *Journal of American Institute of Architects*, Washington, D. C.

Every citizen of the United States who wants facts will read this book!

Ready today.

\$2.25 a copy post paid to any address in the world.

A binder for your copies of The NATION'S BUSINESS

PRESERVE your copies of The NATION'S BUSINESS. This is a critical period in American history; The NATION'S BUSINESS is the history of this critical period. And the writers of the history are the men who are making it.

The NATION'S BUSINESS will continue to give you the most authoritative information obtainable—the contributions of the men who are guiding this nation and her industries in this great crisis.

Binders sent postpaid with your name on cover; cloth, \$1.25 each; leather, \$1.50

The NATION'S BUSINESS

Washington, D. C.

Floating the Nation's Debt

(Concluded from page 41)

to the packers as it is that Liberty Loans should be floated. If \$100,000 be the extreme limit that a business man can take care of through his bank, he furnishes the Government with that amount and can do no more. But by selling as above suggested, he can furnish the Government with \$100,000 every time it needs it, and if he is willing to make a loss by so doing, all the more credit to him.

But Liberty Loans are not all of war finance. There are greatly increased taxes to be paid, War Savings Stamps to be sold, and war benevolences to be supported.

Increased taxes are derived from increased incomes and increased business profits—the larger the incomes and the profits, the greater the taxes for war purposes. Yet some voices are raised in favor of poorer general business. They say everything not necessary for the war should be cut down or cut out. I do not think so. About the worst thing that could happen at the present time would be a fit of the blues among business men generally.

We cannot have "business as usual." Business must be modified to suit conditions; some kinds of business must suffer, and some must be abandoned, but, speaking generally, "better business than usual" would be a fine thing, that we may pay larger taxes, that we may the more easily absorb Liberty Loans, that wages may be higher and saving easier for the masses, that the huge funds for the comfort and help of our fighting men may be freely given!

Business Assays High

(Concluded from page 43)

Beneath all these problems there are even greater problems for business men. There are great, far-reaching industrial forces at work throughout the entire world. It is already evident that social conditions will not be the same after the war. Great movements are at work which to a large extent are irresistible. Business men must realize that there is hanging in the balance today the whole question of private property, the great developing force of individual incentive and reward. A great purpose of business organization at the present time must be to bring to the discussion of these matters, the knowledge and experience of business men. The great force at work cannot be resisted, but, if business men can bring themselves into accord with the spirit of the times, they may make available their knowledge and experience as a guide in the development and control of these great social and industrial forces.

What the business men do today in the war largely determines the part which they are to play after the war. If business men respond effectively to the call for national service, if they make themselves available for this service, if they remove the basis of distrust, they will prepare themselves for full part in working out the social problems after the war.

In this connection it is particularly true that business men as a whole are interested in what is done in individual industries. All business is on trial. The undertaking of each is made more difficult by the mistakes and successes of some. This affords a great opportunity for organized business as a whole in working out broad, constructive policies and programmes affecting all business. The Chamber of Commerce of the United States as the central organization of American business has a great opportunity and a great responsibility. It can focus and direct the skill and ability of business men as a whole and bring about a sense of joint responsibility and obligation.

New Styles in Business

(Concluded from page 35)

that has affected even the cost of growing oranges, as the British Food Ministry has had to agree in looking after retail prices in London. All of this has been achieved in the face of a shortage in fuel which first sent olive groves to the furnace and then gave an impulse to development of hydro-electric power with the government taking a liberal hand.

France, with the burden of the Western Front on her soil, reports that in 1917 commercial transactions were 37% greater than in 1916, that whereas 55% of factories and business houses were inactive in August, 1914, this percentage had dropped to 23 at the end of 1917, and that the workers in factories were slightly more numerous in 1917 than in times of peace.

Of the allied countries, England has had the greatest industrial changes. Events have not marched according to expectation, either. For example, when the war opened problems of unemployment for large numbers of workers were looked for, and a great fund was collected, under the patronage of the Prince of Wales, to relieve the distress that was believed to be inevitable. The well-intentioned philanthropists were left in wonderment, however, when unemployment dropped toward the vanishing point under a demand for labor that is described as actually fierce.

Where industries have been turned to war work, and controlled by the government, a question has arisen about the maintenance of pre-war good will against the day when peace will return. After some discussion of this problem, the British government has sanctioned limited advertising, in order that good will may be attained. Our own Railroad Administration in connection with its control of the railways has taken a somewhat different position, holding that the roads could not advertise except in the way of announcing train schedules and the like.

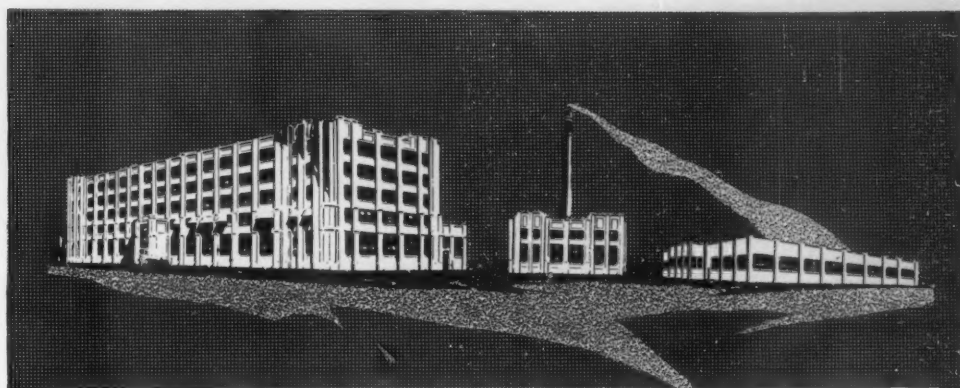
Waging War With Tax and Bond

(Concluded from page 53)

The Allies and the United States are spending each month more than the entire cost of the Franco-Prussian war; they are spending each year four times the cost of the Civil War. But the United States, with its great resources, is able to meet its share of any expenditures for this great purpose, however large.

How have we been collecting this vast sum of money? In Germany they are raising it largely by bond issues, and I believe they either have or soon will have to pay the interest on their debt by additional issues of bonds. In Great Britain they have raised about 25 per cent, roughly, by taxation. In the United States, during this fiscal year, I assume we will raise three and nine-tenths billions by taxes—we may get very much more—and we will have issued, say, nine billions in bonds. This would indicate that taxes will constitute about 32 per cent of our total expenditures. If, however, we deduct the loans of about five billion dollars to the Allies, we shall have a rate of taxation of about fifty-fifty, as they call it, or just about equal to the bond issues.

You cannot properly finance a war without relying primarily upon taxes. The issuance of bonds should be more or less complementary to taxes. We should then rest on a sound basis, and that would mean we should have no difficulty, in my opinion, in financing the war.



New Plant of Wilder Tanning Co. at Waukegan, Ill.

A Book On Factory Construction for Industrial Executives

Executives who are interested in getting the most out of their investment in construction work will be interested in "A Better Way to Build Your New Plant"—a concise book which outlines the methods by which many leading corporations are cutting down the cost of their new plants. For your copy address



NEVER in the history of modern construction has there been the opportunity for cash saving through scientific buying methods which exists at the present time.

The saving of \$60,000.00 on the new plant of the Wilder Tanning Company, resulted from a definite knowledge of *how* and *where* and *when* to buy.

In spite of the chaotic condition of the materials market

F.D.C. SERVICE

FACTORIES - FOUNDRIES - MACHINE SHOPS - WAREHOUSES

is prepared to push your new plant through at a surprising economy in cost—you not only have the advantage of our 15 years' experience in buying, but you also have the opportunity to take over for your own use the favorable options which we ourselves hold for the benefit of our clients on large quantities of materials. Your new plant is ready for actual operation within ninety days from the day you authorize us to go ahead—and it is designed for you *INDIVIDUALLY*—to fit the particular production problems you are contending with. For complete information address

FRANK D. CHASE

INDUSTRIAL ENGINEER

CHICAGO: PEOPLES GAS BUILDING

WHITEHAUL BUILDING: NEW YORK

Foreign Representatives: American Steel Export Co., Woolworth Bldg., New York City

The Great New American Industry

1915 — 215,602

1916 — 520,847

1917 — 901,223

1918 — 3,000,000
(estimated)

Showing increase in gross tonnage
constructed in U. S. Shipyards

IN two years, ship-building and the shipping trade have come to be the foremost American industry. Not only does the prosperity of our foreign commerce depend on shipping, but also the growth of our domestic commerce.

To be well-posted, nautical men, and alert business men, as well, must keep in touch with ship-building, and shipping news, and the progress of marine architecture, navigation questions, port development, and the improvement of inland waterways.

The Nautical Gazette

FOUNDED 1871

SPECIAL OFFER! Send a dollar bill with coupon, and we shall send The Nautical Gazette for six months. Regular subscription, \$3.00 a year; 10 cents a copy.

Enclosed is One Dollar. Send me The Nautical Gazette for Six Months extra! Nautical Gazette, 20 Vesey St., New York

Name _____ Address _____



The Spirit of War Service

Alone in the midst of war's desolation, the telephone line-man crawls to mend the broken wires.

On all sides the thunder of artillery; in the air bursting shrapnel.

He faces danger with that unconquerable spirit of war service which permits him to think only of maintaining the telephone connections.

The safety of the troops depends on these lines of communication, often used for the sentries' warnings, the carrying of official commands and the

summoning of reinforcements.

In a dark hole hidden among sparse brushwood are the telephone operators, some of whom have been for months in their damp cave ceaselessly swept by shells.

And they are admirable, all these heroes of the Signal Corps, whether serving in darkness or in the all too bright light of day.

The spirit of war service, over here as well as over there, furnishes the nerves, the endurance, the morale—the stuff that wins war.



AMERICAN TELEPHONE AND TELEGRAPH COMPANY
AND ASSOCIATED COMPANIES
One Policy One System Universal Service

How Do You Shelve Your Loose Leaf Records?

In Bundles—or Book Form?



Any office boy can do the latter by using the

F. B. Loose Leaf Holder

Practical and low priced.
Adjustable to fit any size of paper.
Independent of the location of punchholes.

\$3.00 Per Dozen

Dealers Wanted
Ask your dealer or write to

ROCKHILL & VIETOR, Sole Agents, Dept. "F-B"

(Branch: 100 N. Market St., Chicago) 22 Cliff St., New York

If Business Takes the Trade Acceptance

(Concluded from page 49)

service for the buyer, carrying the obligation upon his books to maturity and frequently well beyond.

But most serious of all the evidence we have discovered against the open account method is the fact that a surprisingly large percentage of the obligations expressed in this form are not paid promptly at maturity.

Possibly this is due to a tendency from which even the best of men are not free, to select the line of least resistance; to do the things first the need of doing which appears most conspicuously, and to put off until more convenient time, performance of obligations which in their form suggest the ideas of ease and latitude.

But in any event the fact is that these open account obligations are not paid with that degree of promptness which is indispensable in what we have come to recognize as sound and careful business. Thirty-day obligations are allowed to run to 35 or 40 days; and 60-day obligations to 75 and 80 days; and longer obligations are similarly treated. In this way the proper balance of the commercial situation is seriously disturbed.

ANOTHER weakness inherent in the open account method and one the seriousness of which should require no comment in these times, is that the unavoidable tendency of this method is against liquidity of commercial credit. The open accounts as regards the usability of a large portion of the value expressed are frozen; and value running into billions of dollars is tied up at a time when the plainly indicated needs of the nation demand that it be kept in fluid, available, and easily-usable form.

The conclusions of the American Trade Acceptance Council, which has now for several months been investigating this subject, are most definite, to the effect that for the particular purpose contemplated in its creation by the Federal Reserve Board—namely, to express an obligation arising from a current merchandise transaction, the trade acceptance method clearly and unmistakably is superior to any other method we have been able to discover.

THE CHAMBER'S NEW OFFICERS

Harry A. Wheeler of Chicago was unanimously elected President of the Chamber of Commerce of the United States at the Sixth Annual Meeting in Chicago last month.

Joseph H. Defrees was unanimously re-elected as Vice-President from the Northern Central Division. The three Honorary Vice-Presidents were re-elected, *i. e.*, Hon. Charles Nagel of St. Louis, A. B. Farquhar of York, Pa., and John H. Fahey of Boston, Mass.

R. G. Rhett, Charleston, S. C., the retiring President, was elected by the Board to a vacancy accredited to the Third District (South Atlantic States). He was also elected Honorary Vice-President. John Joy Edson, Washington, D. C., was re-elected Treasurer.

The election of the three regular Vice-Presidents who represent the Eastern District, the Southern Central District and the Western District was postponed until the next meeting of the Board and the same action was taken as regards the appointment of an Executive Committee and the election of its chairman.

The Board of Directors for the coming year has the following three new members: Charles A. Otis of Cleveland, Ohio; M. J. Sanders of New Orleans; and Ernest T. Trigg of Philadelphia. R. Goodwyn Rhett was elected to succeed J. H. McLaurin of Jacksonville, Florida, resigned.

The Miracle of the Ships

(Continued from page 48)

Americans, and they will surely make good.

The chief difficulty in the labor situation is not local, nor is it blamable upon a class or group; it rests upon and grows out of a fundamental weakness in our democratic form of society. Under the loose relationship which furnished us with sufficient social binder to keep us going in times of peace and prosperity, our citizenship lost the ability to think in general terms. Even yet very few have escaped from this blight of provincialism, sectionalism and class consciousness. Indeed, a vast majority of people are still hopeless individualists, with little or no national consciousness in their souls.

We must face these conditions fearlessly and with courage. We shall never be in shape to really fight this war to a glorious finish until we have mobilized the whole nation upon national principles and in accordance with one national policy. We must have all labor, including the shipyard group, brought together, and all capital with them. These two great arms of our national life must be related to each other and to our government, in a *modus vivendi*, covering the period of the war. We must have such an agreement and enact it into law, so that the national administration shall have on either side, labor and capital, each pledged to complete service and sacrifice, until the war is won. This will eliminate profiteering of capital and profiteering of labor, which is what strikes and class agitations amount to, really. We cannot ask the workmen of the shipyards to do one thing, and the other classes of the community to do another thing; we must all, from every walk in life, abandon every self interest, make every sacrifice, until the war is won.

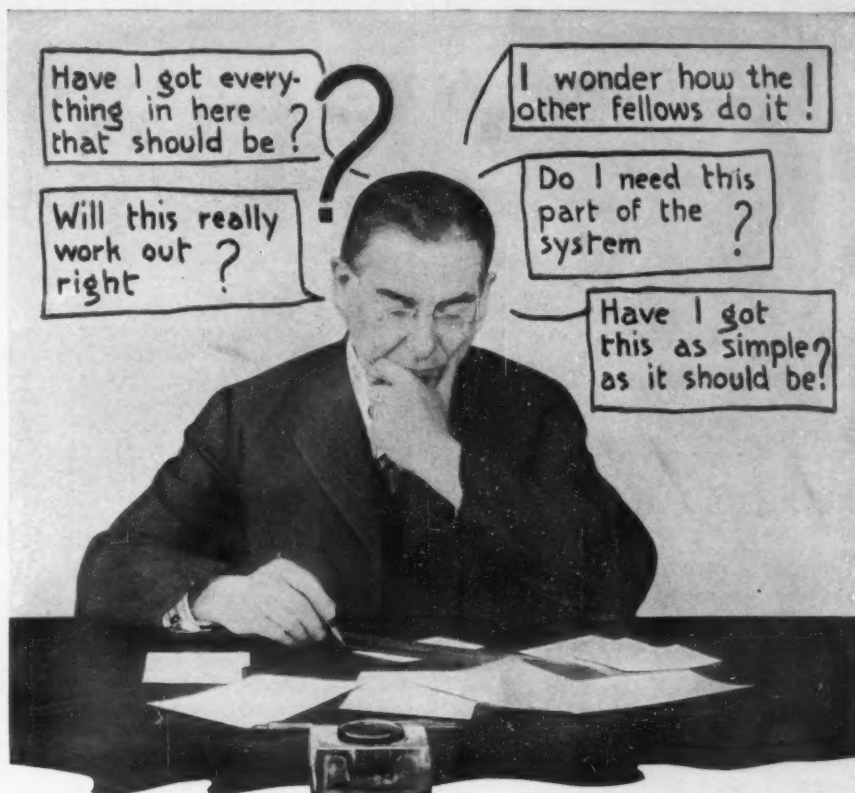
We believe that the laboring men of America are as patriotic as any other class. Like the rest of us they need to be told the truth. The day has come when all soft speaking must be put aside. The American people must hear, through its public press, the whole truth, and nothing but the truth. Every instance of profiteering, clearly proven, whether by capital or by labor, ought to be spread upon the front page of every newspaper in the land; every slacker in every class ought to be publicly branded; every traitor rich or poor ought to be shot; every alien ought to be put where he belongs. We must know the truth, for the truth alone can make us free.

Each war enterprise is tangled up with every other branch of industry. We must have one large comprehensive governmental policy, with room in it for all complexities and for the biggest leadership to be found in the United States. We must have no parties, no sects, no sections, no classes; we must, at any cost, become a nation of Americans, and Americans only.

Our boys in France and on the sea are fighting for the whole nation, not for any class or interest. If they fight for the whole nation, the whole nation must fight for them.

We must simplify, coordinate and direct the vast resources of our people. We have these resources. The heart of our nation is sound; the will to win this war grows more determined every hour, everywhere. We are going to win this war, not by exploiting personal, class, or sectional interests, which is simply treason, but by every individual in the United States giving his soul loyally to his nation's soul, and offering a sacrificial service worthy of his citizenship.

Because we were unprepared, and because our industrial, economic and political organization was unfit for war conditions, and because



Ever try to plan your own systems?

Save your time—and get the Systems right, *without experiment*—by letting "Y and E" work out all the details for you

(We do not charge for service)

FEW executives or assistants like to depend solely upon their own judgment in designing filing systems, follow-ups, ledgers, credit systems, sales records, and the like. Mistakes are too easy. It is much safer and quicker to let "Y and E" work out the proposition for you.

Without charge—without self-interest—purely as a matter of service and good will—we will give you the benefit of everything we have learned in our 38 years of study and experience—years in which we have made nearly a million system installations, covering every line of business.

If you are having trouble with your purchase records, let us show you a purchase system that will eliminate the trouble. If your stock keeps running above or below the limits specified, let us show you the right kind of stock record system, adapted



exactly to your business. If your letters or catalogs or orders aren't always easy to find—ask what we would recommend as a better filing system. If your sales records aren't definite and useful let us suggest something that *will be* definite and useful. Whatever records or systems you have that should be clearer, simpler, more comprehensive—let us have an opportunity to help you.

Should there be need of new equipment and you elect to buy it from "Y and E" because you like us, or because you don't find equal quality elsewhere, or for any other reason, you will find our prices attractive also. Otherwise, we'll simply work to get your business later! At any rate no obligation is implied. Mail coupon for further information or ask at the "Y and E" Store in your city.

YAWMAN AND ERBE MFG. CO.

528 St. Paul St., ROCHESTER, N. Y.

Makers of "Y and E" Filing Devices and Office Systems

BRANCH OFFICES: Boston, Springfield, Mass., New York, Albany, Newark, Philadelphia, Washington, Pittsburgh, Buffalo, Cleveland, Chicago, Kansas City, San Francisco, Oakland, Los Angeles. (Agencies and Dealers in more than 1,200 other cities.)

In Canada: The Office Specialty Mfg. Co., Ltd., Newmarket, Ont.

"Y and E" Rochester, N. Y.
Without charge or obligation please send information about the subjects checked X below:
☐ System Service, ☐ Machine Accounting Equipment, ☐ Filing Systems, ☐ "Fire-Wall" Steel Cabinets, ☐ Efficiency Desks, ☐ Super-Wood Filing Cabinets, ☐ Steel Shelving Systems, ☐ Shannon Filing Systems and Supplies, ☐ Blueprint Files, ☐ Record Filing Safe, ☐ Systems for

(purpose)

Write name and address in margin. Attach to letterhead and mail.

The B/L Collection Bank of Chicago



This bank is particularly well equipped to serve manufacturers, jobbers, wholesalers, and dealers located in States West of Pennsylvania to the Pacific Coast. We offer the facilities of a Chicago checking account with or without a line of credit. Our collection Department is a special feature of this service. We make a specialty of handling Bill of Lading collection items. Correspondence invited.

**Union Trust Company
CHICAGO**

One of Chicago's old conservative banks doing strictly a commercial business. Established 1869

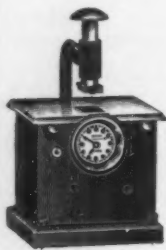
Account for Every LABOR MINUTE

HERE is the one logical method of keeping an accurate account of when you received and when you sent out letters, orders, contracts, etc. It will avoid all disputes, as it records every minute of the day or night.

FOLLETT'S

New Model

Time Stamp



Absolutely automatic, requires no attention and is the only POSITIVELY ACCURATE register on the market. Write for full information and for our latest catalogue

Follett Time Recording Co.

5 West Broadway, New York City
Manufacturers of Time Stamps
and Time Records

HOTEL MCALPIN

BROADWAY AND 34TH ST.
NEW YORK CITY

AN HOTEL OF THE HIGHEST CLASS SPECIALLY
ADAPTED TO THE NEEDS OF THE BUSINESS MAN

L. M. BOOMER
MANAGING DIRECTOR

millions of our people have been and some still are sound asleep, there have been delays almost unpardonable. Now we must wake up and take our medicine like men. We must learn from the mistakes and failures of the past, and having thus learned our lesson, we must, at any cost, gather every resource of manhood, money and material into one tremendous, shattering blow, which shall smash Kaiserism to the dust, never to rise again.

Building Fighting Spirit—and Ships

(Continued from page 42)

the standardization of wages and conditions which has been effected by the Shipping Board, but much is due to the propaganda of the National Service Section.

Transportation and housing difficulties still impede full production. These are being remedied, but overcrowded cars and overcrowded homes still offer good excuse for men not to put in full time at their task. Probably the housing problem is the most serious disability the Shipping Board has to face in its efforts to expedite launchings. At Newport News, for example, when I visited that port recently, the population had doubled, and some 20,000 soldiers, no doubt quite unavoidably, had been suddenly dumped upon the town. The consequence was that both transportation and accommodation facilities broke down under the strain. The New England yards are badly handicapped through lack of housing, the facilities for which lie close at hand. In another locality I have seen men waiting in the bitter cold for cars that were filled far above the Plimsoll mark so to speak. I have seen other men crowded into open lorries when the temperature was below zero, going to and from their work. All these things militate against full production. The housing is coming, we are told, but is it out of place to apply the slogan "For God's sake, hurry?"

Psychology is a potent factor in appealing to shipworkers. One has to deal with a cosmopolitan audience. The true-bred American will work and die for the Stars and Stripes. The Italian and Slav, while loyal to the Republic, may better understand the significance of a possible German victory when linked up with the possible submission of Italy to Austrian dominion in the one case and with the brutalities of Germany towards the Slav peoples on the other. In all cases the men want facts. Tell them the truth about the war and about the need for ships, appeal to their highest emotions, to their love of freedom and to the humanities, and they will make their labor worthy to be ranked with the deeds of their sons and comrades in the battle line.

But do not, I urge, forget that eternal vigilance is the price of liberty. We have more to fear from German intrigue and propaganda than from German bullets. It was not military power which subdued Russia and broke the Italian line. It was the unceasing, un-sleeping mole-like undermining of the national morale which has won for the Kaiser whatever claim he has to military glory.

The shipyard is as it were the main stream where the German propagandists and the German incendiary are at work. But there are tributaries to that stream which must not be neglected. Ships cannot be built without steel plate, without tools, without timber, and the message which we have to deliver to the workers in the shipyards should also be delivered to the workers in subsidiary industries.

Production of ships is showing a gratifying increase in England despite the heavy repair work which Britain is called upon to undertake. Britain's launchings have gone up from

608,000 tons in 1915 to 1,163,000 in 1917. She is saving tonnage by producing at home, in Egypt and in Mesopotamia commodities and food which formerly she largely imported. Her ship and other workers have set aside their hard-won privileges during the term of this war. Labor in America is prepared to do no less than are their British brothers. Business men are showing by their example that the high ideals which gave this nation birth still are the stars to which their wagon has been hitched.

It is inspiring, this magnificent devotion of America to the cause of freedom. Yet, whatever you do here cannot equal what they do over there. In that shell-swept, gas-poisoned hell of carnage they stand, those blue and khaki lines of living valor, rolling back the surging tides of German hate. There are cruel gaps at times in those thin lines, but they are filled by valiant men. The very mass of Teutonic military might threatens to break through and submerge our civilization, but a thousand bayonets flash back the answer "They shall not pass." Waterloos—ten Waterloos—are fought in a week. Marathons—a dozen Marathons—are immortalized every hour. Every moment is fraught with the fate of nations. Yet they will hold the line. But looking with war-weary but resolute eye across the waste of waters to this great land from which alone succor can come, and is coming, they cry to us again "For God's Sake, Hurry Up."

Winter Wheat Looks up Under Stimulating Rains As Shipments to Allies Increase

(Continued from page 33)

more unrelated industries, of figures of things which had happened, not which were happening now; of deductions and conclusions drawn from such antiquated superstitions as bank clearings and index numbers; and like economic fetiches of the past, since they are constantly "fed up" on such traditional lore of vain imaginings. Meanwhile there lay at their hands, all neglected, the means of surest and most dependable knowledge to be learned from that incomparable observer of men and material conditions, the traveling salesman.

What these men learned from each other was of a rare opportunity that is fast fleeting and may never occur again, and which needs such paradoxical qualities as courage tempered with caution, judgment, yet taking chances with fate, but most of all an intelligent study of the great consuming public and of its ways, and some forecast as to what it is going to do next, so that each man's business may adjust itself, constantly and almost automatically, to ever-changing conditions.

Such is the story of business to-day, though each week adds to its uncertainty, and likewise to its realization of how more and more it must conform its course to the needs and necessities of war.

Fortunately the story of the weather is of more rain in the dry sections of the winter wheat belt, from Nebraska southward to northern Texas, and across the Mississippi river all the way from the Great Lakes to the Gulf. Only it is still too dry in south and west Texas. Rains in California have practically assured their spring crops. Also there is more snow in the high altitude of the Sierras and eastward to the Rockies, and consequent improved outlook for irrigation.

The condition of winter wheat has appreciably improved, although fields in some sections of Oklahoma have been plowed up and will be planted to other grains. It is still

too early to express any intelligent opinion as to the probable yield of winter wheat, save for the satisfaction of those who still labor under the delusion that statistics and facts are synonymous and convertible terms. It is very clear, however, that the general condition shows a very great improvement in practically all sections. Seeding of spring wheat is proceeding rapidly under most favorable conditions, and the outlook is for a much larger acreage than last spring. There is also increased planting of oats, barley and rye, since they bring now proportionately higher prices than wheat when the comparative yields per acre are considered.

EARLY vegetables are moving to northern markets in great volume from southern California eastward to the south Atlantic states. The extent and economic value of this great industry are but little realized and understood, nor how comparatively new it is to our experience. South Texas will ship 7000 to 9000 carloads of onions this season from a region which a quarter of a century ago was covered with chaparral and mesquite thickets. New cabbage is coming to northern markets at the rate of 300 cars per week, tomatoes following with 237 cars, and strawberries with 173 cars and steadily growing. The acreage now planted to early Irish potatoes is 70 per cent greater than last spring. Shipments are much hampered by lack of cars and long and disastrous delays in transit.

Farmers are still holding wheat, and receipts at primary points are painfully small.

A nation-wide survey of the status of farm labor indicates that the shortage is not now so serious as generally supposed, though it will grow more acute with calling the second draft, and the coming of harvest. Obviously planting and seeding do not require as much labor as gathering and harvesting. Everything possible is being done to obviate the coming trouble. Retired farmers are returning temporarily to their farms. Rural high school children are volunteering their services. Merchants in the small towns are giving some of their time. Tractors are being bought heavily. Farmers are working early and late. It is very certain that there will be a great acreage planted despite all the difficulties.

Meanwhile wages for farm laborers have risen appreciably.

In industrial centers labor strikes and walk-outs still perplex and handicap business. They break out unexpectedly, even in unskilled trades, and are a serious detriment while they last towards the proper coordination of all classes in the great purpose to which the nation is pledged.

When This Nation Wills Ships

(Concluded from page 47)

upon the fullest acceptance of responsibility by business men that this shortage shall be brought to an end by an irresistible organization of all our forces behind ship-building. In short, we shall answer the call of our Allies in this hour of supreme need by staking the lives of our sons upon an unwavering confidence that we shall see to it that ship shortage is stopped by the grace of as heroic determination and action as Marechal Joffre voiced when in a similar crisis he said, "They shall not pass."

When we make these sacrifices, when we express our will to help in definite work instead of indefinite offers of assistance, we shall flash to the enemy the message that America is building more ships in less time than ever was done by any country before in the world's history—a message of America's power for victory that will shorten the war.



A Real Chamber of Commerce Book

HERBERT S. HOUSTON, Member of the Committee of the United States Chamber of Commerce on the Economic Results of the War gives in this book a strong exposition of the claim that economic pressure against Austria might have averted the present war.

Economic pressure can be used to help avert future wars. The Chamber of Commerce of the United States has twice supported this view in referendums. As a result of the investigations into the possibilities of using this potent force, this book has been written:

Blocking New Wars

By Herbert S. Houston

When this war is won, the world will demand some practical plan to prevent new wars. This will be the question of supreme and universal interest. President Wilson, in his memorable statement of America's war aims, declared that even the free seas should be closed "by international action for the enforcement of international covenants"—a powerful agency on exerting economic pressure.

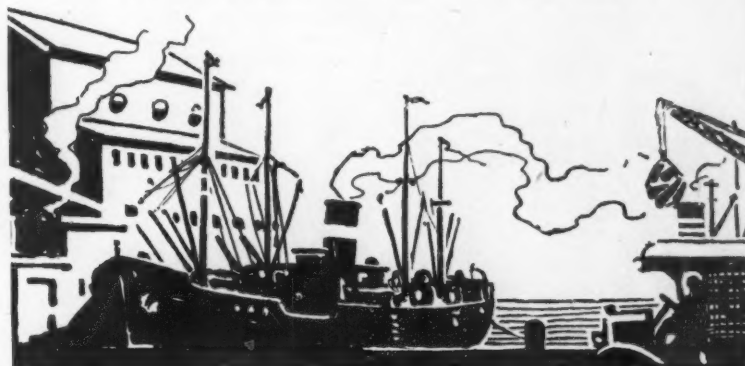
Mr. Houston gives a clear and graphic survey of the arguments and facts both for and against the employment of this not untried weapon. He tells how Napoleon used the embargo and the Kaiser the submarine to throttle business, how the French investor halted the German war-drive after Agadir, and how in the future, commerce can strike down the mailed fist.

At All Bookstores, \$1.00, net.

(Or write your name and address on the margin of this page, and send it to us with a One Dollar bill, and we will send the book postage prepaid.)

Doubleday, Page & Co.

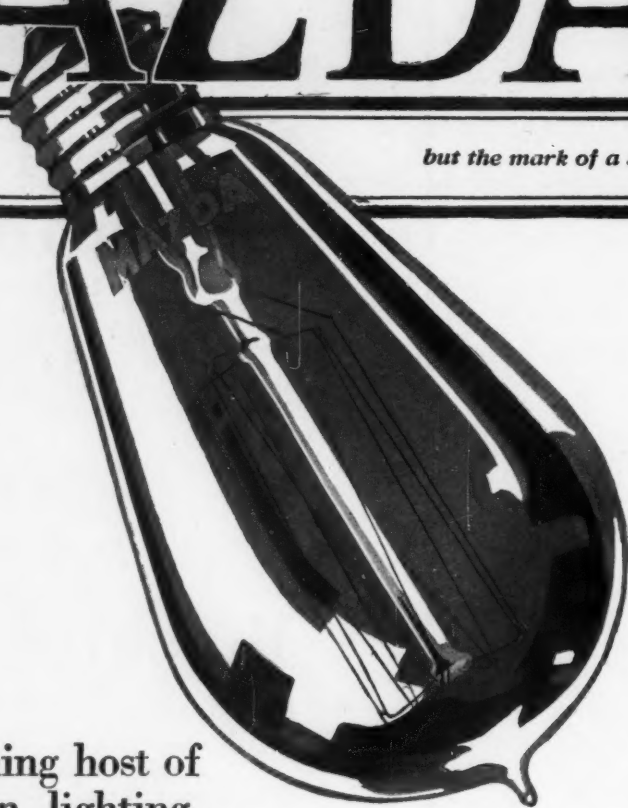
Garden City, N. Y.



MAZDA

"Not the name of a thing,

but the mark of a service"



From the incoming host of new ideas on lighting, MAZDA Service selects for the makers of MAZDA Lamps, only those developments in design, materials and methods that will improve the light you enjoy.

The Meaning of MAZDA

MAZDA is the trademark of a world-wide service to certain lamp manufacturers. Its purpose is to collect and select scientific and practical information concerning progress and developments in the art of incandescent lamp manufacturing and to distribute this information to the companies entitled to receive this Service.

MAZDA Service is centered in the Research Laboratories of the General Electric Company at Schenectady, New York. The mark MAZDA can appear only on lamps which meet the standards of MAZDA Service. It is thus an assurance of quality. This trademark is the property of the General Electric Company.



RESEARCH LABORATORIES OF GENERAL ELECTRIC COMPANY

